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Missouri Timber Industry- An Assessment of Timber Product Output and Use, 1997

Ronald J. Piva, Shelby G. Jones, Lynn W. Barnickol, and Thomas B. Treiman

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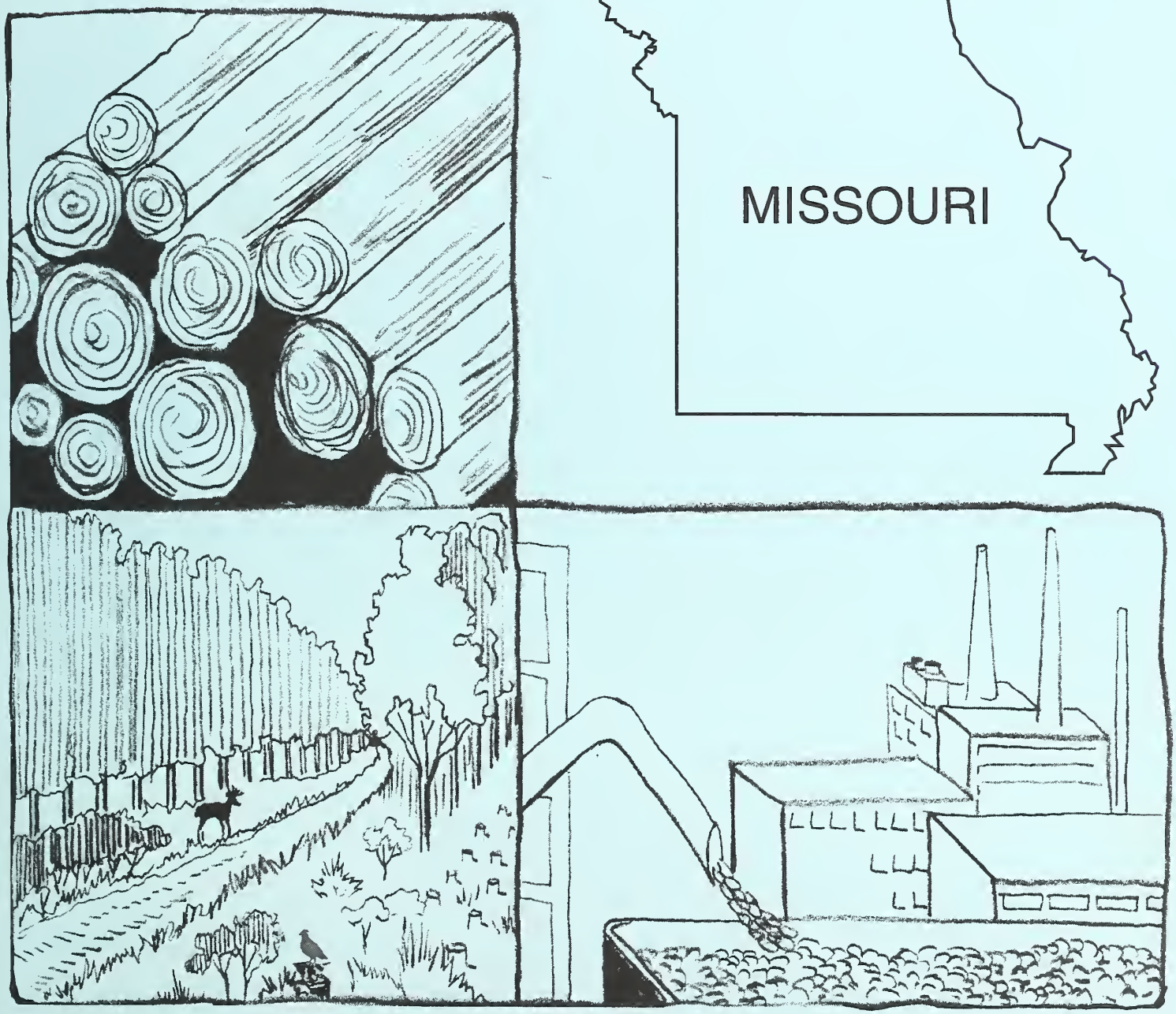

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Forest Service—U.S. Department of Agriculture
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FOREWORD

This bulletin reports findings of a survey of all primary wood-using mills in Missouri in 1997. Details of the industry's size, composition, use of roundwood, and generation and disposition of residues are discussed. Such detailed information is necessary for intelligent planning and decisionmaking in wood procurement, forest resource management, forest industry development, and forest research.

Special thanks are given to the primary wood-using firms that supplied information for this study, to the contracting foresters (listed below) who canvassed the wood-using firms, and to the Forest Products Utilization & Measurements Unit of the Missouri Department of Conservation that edited the data. Their cooperation is greatly appreciated.

Contractor	**Sub-contractors**	
Bob Massengale	Ralph Allison	Lezlee Johnson
	Larry Battey	Lynn McClure
	Scott Brundage	Don Schultz
	Will Dietzel	Skip Stokes
	Randy Herberg	Clint Trammel

In this bulletin, all volumes are reported in product-specific standard units and/or cubic feet. When necessary, volumes reported by mills in nonstandard units were converted to standard units using regional conversion factors. Reported trends and changes in the Missouri primary wood-using industry are based on comparisons with the previous survey conducted in 1994. Row and column data of tables may not sum due to rounding, but data in each table cell are accurately displayed.

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PRIMARY WOOD-USING INDUSTRY

- In 1997, Missouri's primary wood-using industry was comprised of 417 sawmills, 10 charcoal mills, 8 cooperage mills, 9 post mills, 6 handle mills, 1 veneer mill, 1 pulp mill, and 6 mills producing miscellaneous products (table 1 and fig. 1).

- There were 5 more sawmills in 1997 than in 1994. Large sawmills producing more than 5 million board feet increased from 32 mills in 1994 to 35 mills in 1997. Medium sawmills producing 1 million to 5 million board feet rose from 189 mills in 1994 to 212 mills in 1997. The small sawmills producing less than 1 million board feet decreased from 191 mills in 1994 to 170 mills in 1997.

- The 458 primary wood-using mills of Missouri processed 140.5 million cubic feet of roundwood in 1997, an increase of 4 percent from 1994 (table 2).

- Only 8.5 million cubic feet of the roundwood processed in 1997 came from other States. Illinois supplied 4.3 million cubic feet and Arkansas supplied 1.9 million cubic feet. Indiana, Iowa, Kansas, Nebraska, Alabama, Kentucky, Ohio, Oklahoma, Pennsylvania, Tennessee, and West Virginia combined supplied the remaining 2.3 million cubic feet.

- Saw-log receipts increased from 705.2 million board feet in 1994 to 732.9 million board feet in 1997, a 4-percent increase (table 3).

- In late 1997 and 1998, three chip mills began operations in southern Missouri, supplying chips for out-of-State pulpwood plants. The information in this resource bulletin may be used as baseline data to show the impacts, if any, of chip mill operations on Missouri's forests.

INDUSTRIAL ROUNDWOOD PRODUCTION

- In 1997, production of industrial roundwood from Missouri's forestland was 139.6 million cubic feet, an increase of 5 percent from 1994. Softwood industrial roundwood production decreased by 2 percent, to 11.9 million cubic feet, while hardwood

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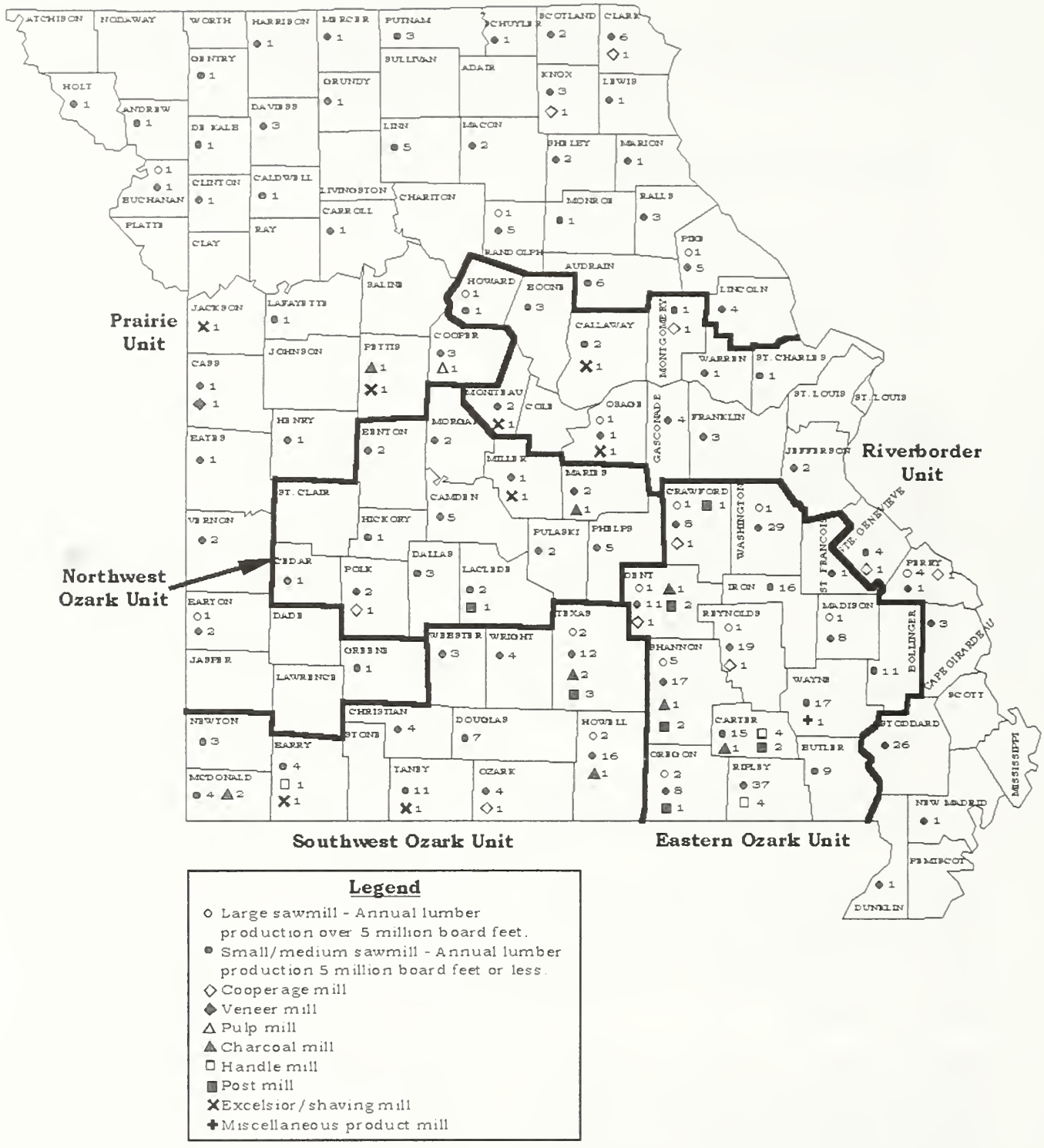

Figure 1.—*Primary wood-using mills in Missouri, 1997.*

industrial roundwood production rose by 6 percent, to 127.7 million cubic feet (table 4).

- The Eastern Ozark Unit was the leading producer of industrial roundwood in 1997 with 60.1 million cubic feet. The Southwest Ozark Unit was next with 27.0 million cubic feet, followed by the Prairie Unit with 23.8 million cubic feet, the Riverborder Unit with 16.8 million cubic feet, and the Northwest Ozark Unit with 12.1 million cubic feet (table 5 and fig. 2).

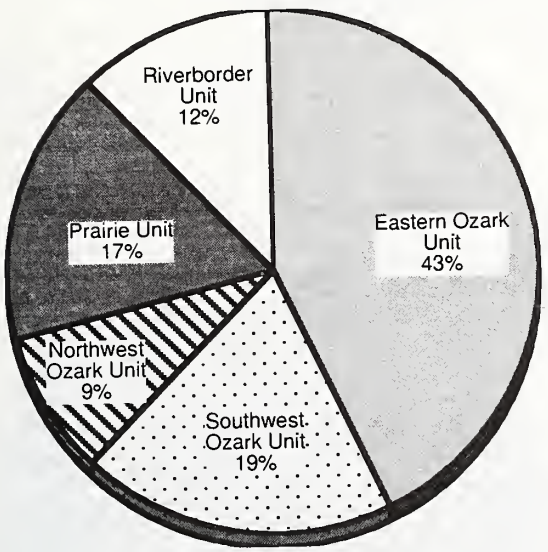

Figure 2.—*Industrial roundwood production by Forest Survey Unit, Missouri, 1997.*

- Between 1994 and 1997, the Northwest Ozark Unit had the largest increase in production of industrial roundwood with a 25-percent increase, followed by the Southwest Ozark Unit with a 16-percent increase and the Prairie Unit with a 10-percent increase. The Eastern Ozark and the Riverborder Units had a 1- and 2-percent decrease since 1994, respectively.

- Fifty-four percent of the softwood industrial roundwood and 42 percent of the hardwood industrial roundwood came from the Eastern Ozark Forest Survey Unit (fig. 3).

- Seven counties—Howell, Oregon, Reynolds, Ripley, Shannon, Texas, and Wayne—accounted for 30 percent of all industrial roundwood produced in the State (table 6).

- In 1997, the red oak group made up 48 percent of the species harvested for industrial roundwood, and the white oak group accounted for 25 percent. Shortleaf pine contributed only 6 percent of the total industrial roundwood harvested in the State but was the third most harvested species.

- The production of industrial roundwood from the red oak group increased from 64.5 million cubic feet in 1994 to 67.7 million cubic feet in 1997. Production of industrial roundwood from the white oak group increased from 32.7 million cubic feet in 1994 to 34.7 million cubic feet in 1994 (fig. 4).

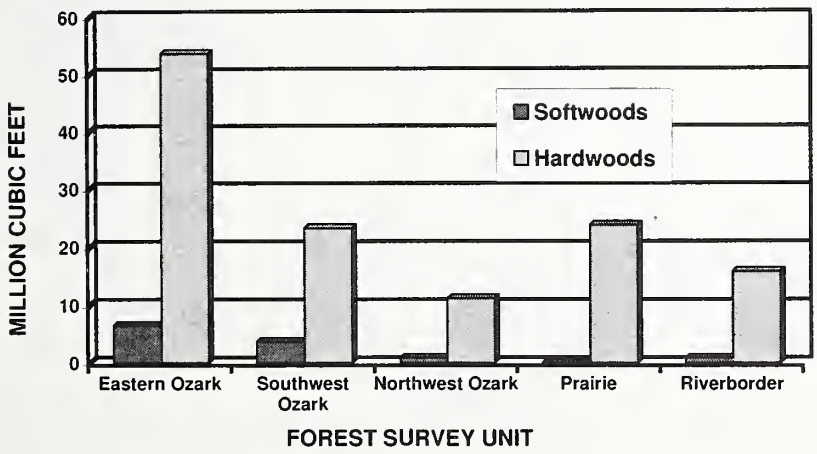

Figure 3.—*Industrial roundwood production by Forest Survey Unit and hardwoods and softwoods, Missouri, 1997.*

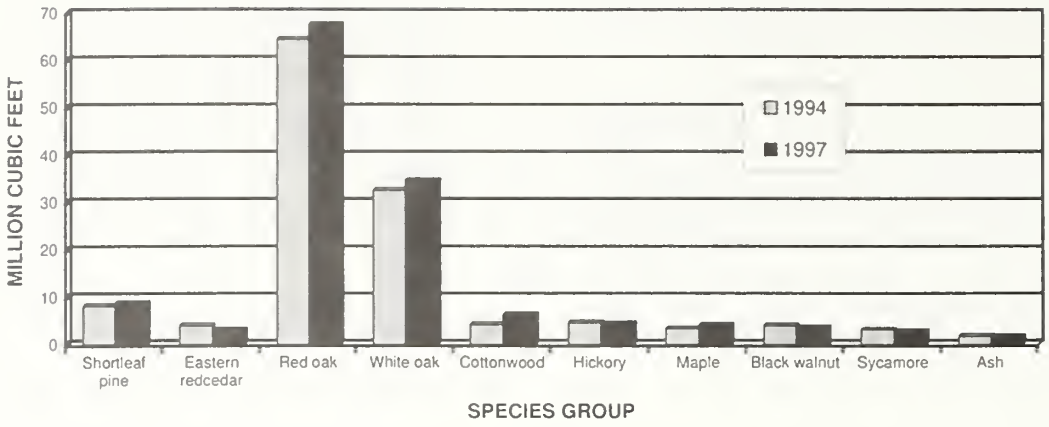

Figure 4.—*Industrial roundwood production by selected species groups, Missouri, 1991 and 1997.*

- Only 5 percent of the wood harvested in Missouri in 1997 was sent to mills in other States. Kentucky received 36 percent (2,731 thousand cubic feet) and Arkansas received 25 percent (1,932 thousand cubic feet) of the industrial roundwood shipped out of State (table 7).

Saw Logs

- In 1997, industrial roundwood production of saw logs was 710.0 million board feet and made up 90 percent of the total industrial roundwood production in the State (table 8 and fig. 5).

- Saw-log production from industrial roundwood increased by 5 percent from 1994 to 1997. The Northwest Ozark Unit had the highest increase with 25 percent, followed by the Southwest Ozark Unit with a 19-percent increase, the Prairie Unit with a 9-percent increase, and the Riverborder Unit with a 2-percent increase. The Eastern Ozark Unit had a 4-percent decrease in saw-log production.

- In 1997, the Eastern Ozark Unit accounted for 44 percent of the industrial roundwood harvested for saw logs, followed by the Southwest Ozark Unit and the Prairie Unit each with 19 percent, the Riverborder Unit with 11 percent, and the Northwest Ozark Unit with 7 percent.

- The red oak species group accounted for 53 percent of the saw logs cut, and the white oak species group accounted for 22 percent. The other major species harvested were shortleaf pine and cottonwood each with 6 percent, hickory and soft maple each with 3 percent, and sycamore and black walnut each with 2 percent (fig. 6).

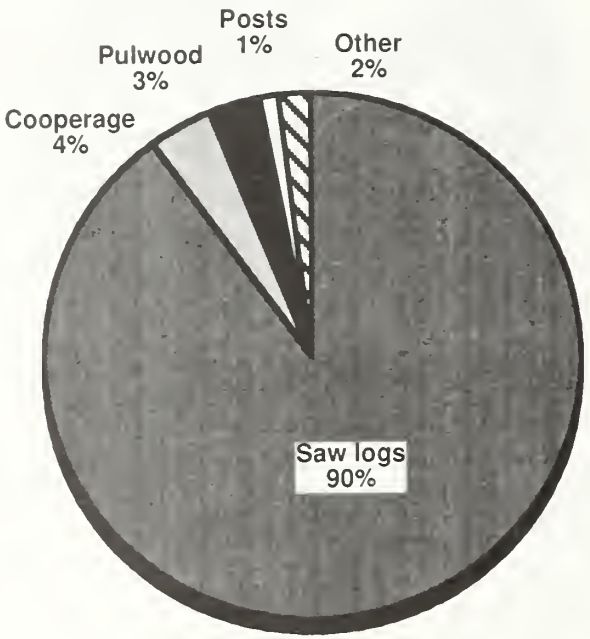

Figure 5.—*Industrial roundwood production by type of product, Missouri, 1997.*

- Only 2 percent or 15.7 million board feet of industrial roundwood cut for saw logs was

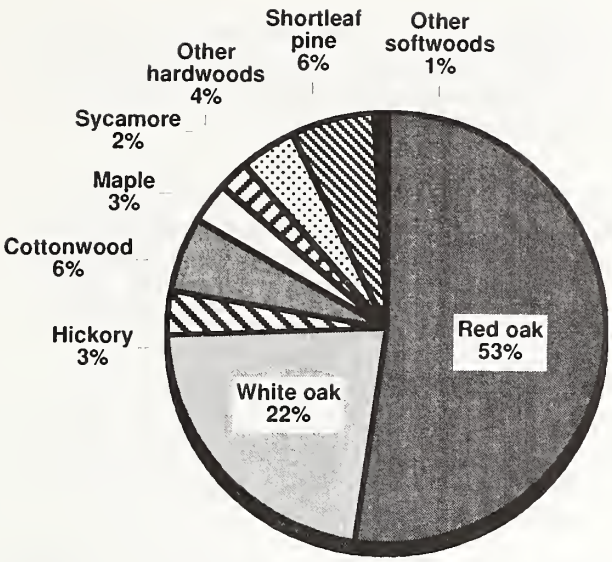

Figure 6.—*Saw-log production by species group, Missouri, 1997.*

sent to mills outside the State. Two-thirds of these exports went to mills in Arkansas (5.3 million board feet) and Iowa (5.1 million board feet) (table 9).

Other Products

- The production of all other products in 1997, which include charcoal, cooperage, handles, posts, pulpwood, veneer logs, and miscellaneous products, made up only 10 percent of the total industrial roundwood harvested in Missouri.

- Cooperage production is the second largest consumer of industrial roundwood in the State, but accounted for only 4 percent of the total volume in 1997. Production increased by 20 percent, from 25.6 million board feet in 1994 to 30.7 million board feet in 1997. White oak harvested for cooperage production accounted for 15 percent of the industrial roundwood volume from the white oak species group (table 10 and fig. 7).

- Industrial roundwood production for veneer logs continued to decline, falling from 5.0 million board feet in 1994 to 4.2 million board feet in 1997. The white oak and black walnut species groups made up 89 percent of the total veneer-log production. The Prairie Unit and the Riverborder Unit accounted for 63 and 28 percent, respectively, of the volume of veneer logs (table 11).

- Pulpwood production from industrial roundwood in the State in 1997 was 55.0 thousand cords, up 185 percent from 1994. New chipping plants in Arkansas and increased production of existing plants in Arkansas and Kentucky accounted for this increase. The Eastern Ozark Unit supplied 46 percent of the roundwood, followed by the Riverborder Unit with 29 percent, the Southwest Ozark Unit with 14 percent, and the Prairie Unit with the remaining 10 percent (table 12).

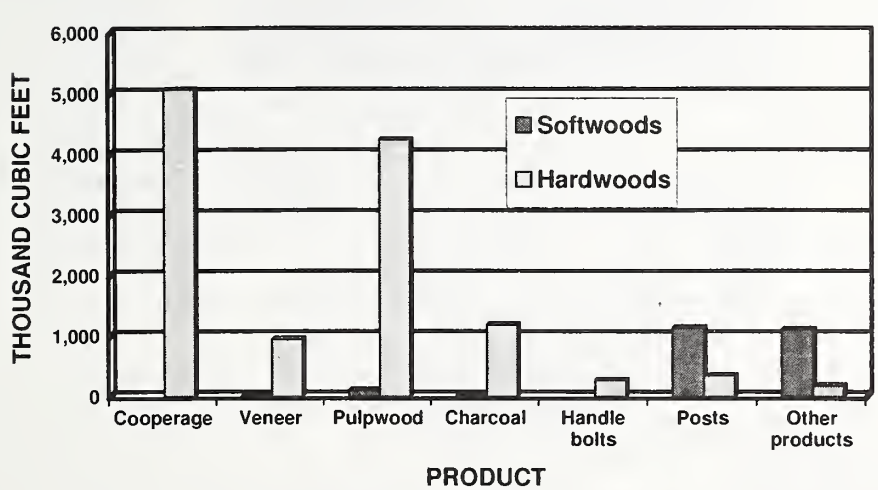

Figure 7.—*Other product production by type of product and hardwoods and softwoods, Missouri, 1997.*

- Charcoal production continued its decline, falling by 50 percent from 34.6 thousand cords in 1994 to 17.4 thousand cords in 1997. The oak and hickory species groups combined accounted for 97 percent of the charcoal production from industrial roundwood. The Eastern Ozark Unit supplied 45 percent of the industrial roundwood for charcoal production in 1997, followed by the Southwest Ozark Unit accounting for 37 percent, the Northwest Ozark Unit accounting for 17 percent, and the Prairie Unit with only 1 percent of the volume (table 13).

- The production of miscellaneous products from industrial roundwood accounted for 2 percent of the total roundwood production in Missouri in 1997. These products include excelsior, handle bolts, mine timbers, and posts (tables 14 and 15).

TIMBER REMOVALS FOR INDUSTRIAL ROUNDWOOD

- Total wood material harvested for industrial roundwood production from Missouri in 1997 came to 237.3 million cubic feet, a 9-percent increase since 1994 (table 16).

- Fifty-nine percent of the total woody material harvested was used for wood products; the rest was left on the ground as harvest residue (fig. 8).

- Of the total volume of woody material harvested, 60 percent came from growing stock; the rest was from non-growing-stock material, which includes limbwood, saplings, cull trees, dead trees, and nonforest trees.

- In 1997, there were 143.3 million cubic feet of growing-stock material harvested from Missouri's forest land, a 6-percent increase since 1994.

- Seventy-seven percent of the growing stock harvested came from sawtimber-size trees, while only 4 percent came from poletimber-size trees. The remaining 19 percent of the growing stock harvested was left on the ground as logging residue.

- Sawtimber removals for industrial roundwood increased by 6 percent and poletimber removals increased by 3 percent between 1994 and 1997. Logging residue (growing-stock material that was not utilized) increased by 4 percent.

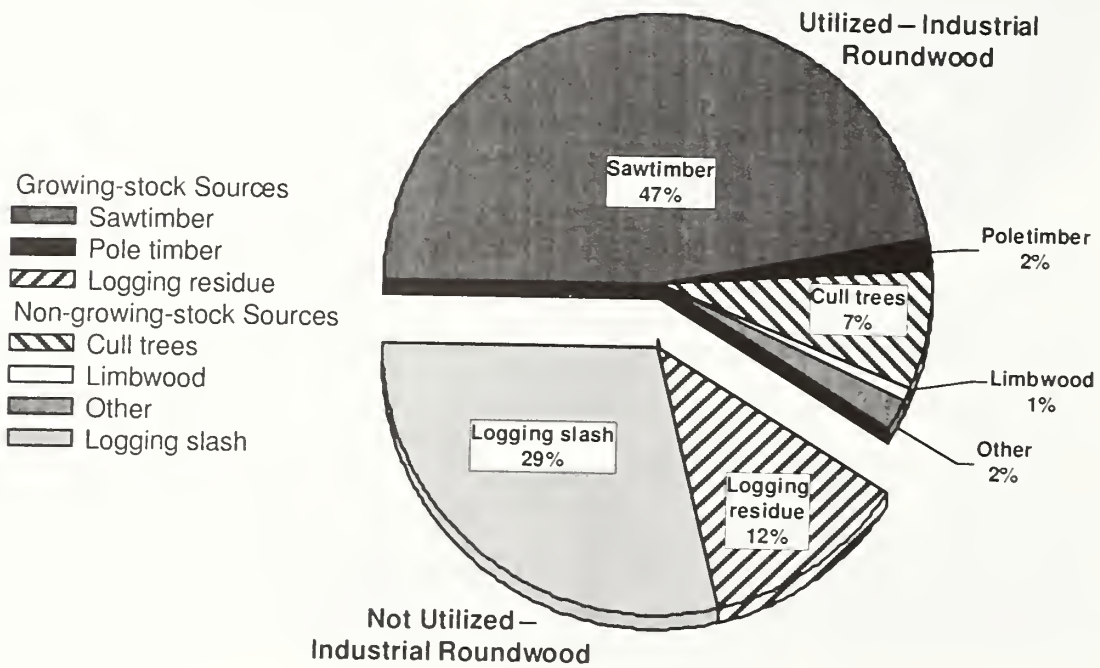

Figure 8.—*Distribution of timber removals for industrial roundwood by source of material, Missouri, 1997.*

- Non-growing-stock material harvested for industrial roundwood totaled 94.0 million cubic feet in 1997, an increase of 14 percent since 1994.

- Only 25 percent of the non-growing-stock material harvested was used for industrial roundwood products; the rest was left on the ground as logging slash.

- Cull trees accounted for 68 percent of the non-growing-stock material that was used for roundwood products, followed by limbwood with 12 percent, nonforest trees with 11 percent, dead trees with 8 percent, and saplings with 1 percent.

- In 1997, there were 62.2 million cubic feet of industrial roundwood harvested from growing stock in the Eastern Ozark Unit, 27.2 million cubic feet in the Southwest Ozark Unit, 24.2 million cubic feet in the Prairie Unit, 17.3 million cubic feet in the Riverborder Unit, and 12.4 million cubic feet in the Northwest Ozark Unit (table 17).

- Hardwoods made up 92 percent of removals from growing stock for industrial roundwood in 1997.

- Six counties—Oregon, Reynolds, Ripley, Shannon, Texas, and Wayne—accounted for 26 percent of all of the sawtimber removals from timberland in the State (table 18).

- Sawtimber removals from timberland rose by 7 percent between surveys, from 522.4 million board feet in 1994 to 556.6 million board feet in 1997 (table 18).

- A total of 97.7 million cubic feet of harvest residue (logging residue and logging slash) was left after the harvest of industrial roundwood in 1997 (table 19). This 14-percent increase since 1994 came mostly from non-growing-stock logging slash.

PRIMARY MILL RESIDUES

- Missouri's primary wood-using industry generated 2.1 million green tons of residues in the process of converting industrial roundwood into products, a 6-percent increase from the 1994 volume of 2.0 million green tons of mill residues generated (table 20).

- In 1997, hardwood residue made up 93 percent of the total residues generated by primary wood-using industries.

- Coarse wood residues such as slabs, edgings, and veneer cores accounted for 49 percent of the total residue material. Fine wood residue such as sawdust and veneer clippings accounted for 30 percent, and bark residue accounted for 21 percent (fig. 9).

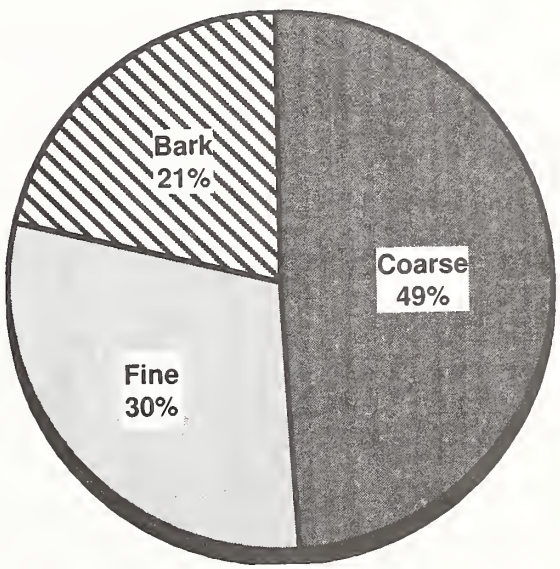

Figure 9.—*Distribution of residues generated by primary wood-using mills by type of residue, Missouri, 1997.*

- Forty-one percent of the residue produced was later used for the production of charcoal. The residues sent to charcoal plants contained 51 percent coarse wood residues, 31 percent fine wood residues, and 18 percent bark residues (fig. 10).

- Other uses for mill residues include miscellaneous uses such as livestock bedding, mulch, small dimension, and specialty items (19 percent), fiber products (14 percent), and industrial and domestic fuel (13 percent).

- In 1997, charcoal plants received 43 percent of the wood residue (course and fine wood residues), fiber product mills received 18 percent, industrial and domestic fuel received 14 percent, and miscellaneous

uses received 12 percent. Miscellaneous uses and charcoal were the major consumers of the bark residues; 46 percent of the residues were used for miscellaneous uses, and another 34 percent were used by charcoal plants.

- Thirteen percent of the total mill residues generated were not used. Fine wood residue made up 46 percent of the residues not used, coarse wood residue 37 percent, and bark residue the remaining 17 percent.

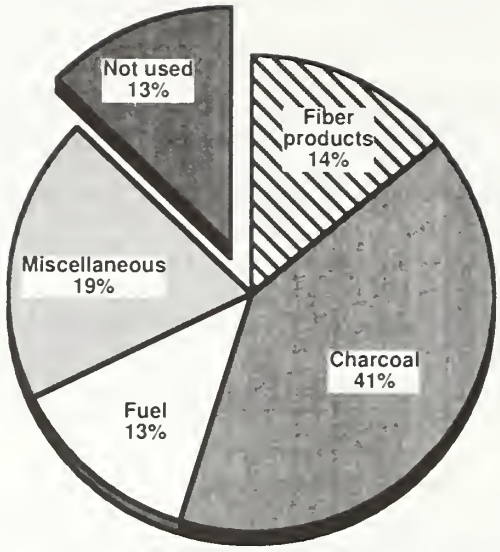

Figure 10.—*Distribution of residues generated by primary wood-using mills by method of disposal, Missouri, 1997.*

APPENDIX

STUDY METHODS

This study was a cooperative effort of the Missouri Department of Conservation (MDC) and the North Central Research Station (NCRS). Forestry consultants, under contract with MDC, canvassed all primary wood-using mills within the State, using questionnaires supplied by NCRS. The questionnaires were designed to determine the size and composition of the State's primary wood-using industry, its use of roundwood, and its generation and disposition of wood residues. Followups to nonresponding mills using additional telephone and personal contacts were made by the forestry consultants, the lead contracting agent, or MDC personnel until a 100 percent response was achieved. Completed questionnaires were sent to NCRS for editing and processing.

As part of data editing and processing, all industrial roundwood volumes reported on the questionnaires were converted to standard units of measure using regional conversion factors. Timber removals by source of material and harvest residues generated during logging were estimated from standard product volumes using factors developed from logging utilization studies previously conducted by NCRS. Finalized data on Missouri's industrial roundwood receipts were loaded into a regional timber removals database and supplemented with data on out-of-State uses of Missouri's roundwood to provide a complete assessment of Missouri's timber product output.

DEFINITION OF TERMS

Board foot.—Unit of measure applied to roundwood. It relates to lumber that is 1 foot long, 1 foot wide, and 1 inch thick (or its volume equivalent).

Central stem.—The portion of a tree between a 1-foot stump and the minimum 4.0-inch top diameter outside bark or the point where the central stem breaks into limbs.

Coarse mill residue.—Wood residue suitable for chipping such as slabs, edgings, and veneer cores.

Commercial species.—Tree species presently or prospectively suitable for industrial wood products. (Note: Excludes species of typically small size, poor form, or inferior quality such as hophornbeam, Osage-orange, and redbud.)

Cull removals.—Net volume of rough and rotten trees, plus the net volume in sections of the central stem of growing-stock trees that do not meet regional merchantability standards, harvested for industrial roundwood products.

Dead removals.—Net volume of dead trees harvested for industrial roundwood products.

Diameter at breast height (d.b.h.).—The outside bark diameter at 4.5 feet above the forest floor on the uphill side of the tree. For determining breast height, the forest floor includes the duff layer that may be present, but does not include unincorporated woody debris that may rise above the ground line.

Fine mill residue.—Wood residue not suitable for chipping such as sawdust and veneer clippings.

Forest land.—Land at least 10 percent stocked (Note: Historically, 16.7 percent was used based on full stocking equaling 167 percent) by forest trees of any size, or formerly having had such tree cover, and not currently developed for nonforest use. (Note: Stocking is measured by comparing specified standards with basal area and/or number of trees, age or size, and spacing.) The minimum area for classification of forest land is 1 acre. Roadside, streamside, and shelterbelt strips of timber must have a crown width of at least 120 feet to qualify as forest land. Unimproved roads and trails or clearings in forest areas shall be classed as forest if less than 120 feet wide. Streams and other bodies of water shall be classed as forest if less than 30 feet wide.

Growing-stock removals.—The growing-stock volume removed from the timberland inventory by harvesting industrial roundwood products. (Note: Includes sawtimber removals, poletimber removals, and logging residues.)

Growing-stock tree.—A live timberland tree of commercial species that contains at least one 12-foot saw log or two saw logs 8 feet meeting minimum log/tree grade requirements, now or prospectively, and that meets specified standards of size, quality, and merchantability. At least one-third of the gross board-foot volume must be merchantable material and at least 50 percent sound at any point. (Note: Excludes rough, rotten, and dead trees.)

Growing-stock volume.—Net volume of growing-stock trees 5.0 inches d.b.h. and over, from 1 foot above the ground to a minimum 4.0 inch top diameter outside bark of the central stem or to the point where the central stem breaks into limbs.

Hardwoods.—Dicotyledonous trees, usually broad-leaved and deciduous.

Harvest residues.—The total net volume of unused portions of trees cut or killed by logging. (Note: Includes both logging residues and logging slash.)

Industrial roundwood production.—The quantity of industrial roundwood harvested in a geographic area.

Industrial roundwood products.—Saw logs, pulpwood, veneer logs, poles, commercial posts, piling, cooperage logs, particleboard bolts, shaving bolts, lath bolts, charcoal bolts, and chips from roundwood used for fuel, pulp, or board products.

Industrial roundwood receipts.—The quantity of industrial roundwood received by commercial mills in a geographic area.

International 1/4-inch rule.—A log rule or formula for estimating the board-foot volume of logs, allowing 1/2 inch of taper for each 4-foot length. The rule appears in a number of forms that allow for kerf. In this form, 1/4 inch of kerf is assumed. This rule is used as the USDA Forest Service standard log rule in the Eastern United States.

Limbwood removals.—Net volume of all portions of a tree other than the central

stem, (including forks, large limbs, tops, and stumps) harvested for industrial roundwood products.

Logging residue.—Net volume of unused portions of the merchantable central stem of growing-stock trees cut or killed by logging.

Logging slash.—Net volume of unused portions of the unmerchantable (non-growing-stock) sections of trees cut or killed by logging.

Merchantable sections.—Sections of the central stem of growing-stock trees that meet either pulpwood or saw-log specifications.

Net volume.—Gross volume less deductions for rot, sweep, or other defects affecting use for roundwood products.

Noncommercial species.—Tree species of typically small size, poor form, or inferior quality that normally do not develop into trees suitable for industrial roundwood products. Classified in volume tables as rough trees.

Nonforest land.—Land that has never supported forests, and land formerly forested where use for timber management is precluded by development for other uses. (Note: Includes areas used for crops, improved pasture, residential areas, city parks, improved roads of any width and adjoining clearings, powerline clearings of any width, and 1- to 39.9-acre areas of water classified by the Bureau of the Census as land. If intermingled in forest areas, improved roads and nonforest strips must be more than 120 feet wide and more than 1 acre to qualify as nonforest land.)

Nonforest land removals.—Net volume of trees on nonforest lands harvested for industrial roundwood products.

Poletimber.—A growing-stock tree at least 5.0 inches d.b.h. but smaller than sawtimber size (9.0 inches d.b.h. for softwoods, 11.0 inches d.b.h. for hardwoods).

Poletimber removals.—Net volume in the merchantable central stem of poletimber trees harvested for industrial roundwood products.

Primary wood-using mills.—Mills receiving roundwood or chips from roundwood for processing into products.

Primary wood-using mill residue.—Wood materials (coarse and fine) and bark generated at manufacturing plants from roundwood processed into principal products. These residues include wood products (byproducts) obtained incidental to production of principal products and wood materials not utilized for some byproduct.

Rotten tree.—A tree that does not meet regional merchantability standards because of excessive unsound cull.

Rough tree.—A tree that does not meet regional merchantability standards because of excessive sound cull. Includes noncommercial tree species.

Roundwood.—Logs, bolts, or other round sections cut from trees (including chips from roundwood).

Sapling.—A live tree between 1.0 and 5.0 inches d.b.h.

Sapling removals.—Net volume in saplings harvested for industrial roundwood products.

Saw log.—A log meeting minimum standards of diameter, length and defect, sound and straight, and with a minimum diameter outside bark of 7 inches for softwoods and 9 inches for hardwoods, or other combinations of size and defect specified by regional standards.

Saw-log portion.—That portion of the central stem of sawtimber trees between the stump and the saw-log top.

Saw-log top.—The point on the central stem of sawtimber trees above which a saw log cannot be produced. The minimum saw-log top is 7.0 inches d.o.b. for softwoods and 9.0 inches d.o.b. for hardwoods.

Sawtimber removals.—As used in table 16, sawtimber removals refers to the net volume in the merchantable central stem of sawtimber trees harvested for industrial roundwood products. (Note: Includes the saw-log and upper-stem portions of sawtimber trees.) In

the case of sawtimber volume removed from timberland inventory as in table 18, sawtimber removals refers to the net volume in the saw-log portion of sawtimber trees harvested for roundwood products or left on the ground as harvest residue, and is usually expressed in thousands of board feet (International 1/4-inch rule).

Sawtimber tree.—A growing-stock tree containing at least a 12-foot saw log or two noncontiguous saw logs 8 feet or longer, and meeting regional specifications for freedom from defect. Softwoods must be at least 9.0 inches d.b.h. and hardwoods must be at least 11.0 inches d.b.h.

Softwoods.—Coniferous trees, usually evergreen, having needles or scale-like leaves.

Timberland.—Forest land that is producing, or is capable of producing, in excess of 20 cubic feet per acre per year of industrial roundwood products under natural conditions, is not withdrawn from timber utilization by statute or administrative regulation, and is not associated with urban or rural development.

Timber product output.—The volume of roundwood products produced from an area's forests.

Timber removals.—The total net volume of trees removed for industrial roundwood products or left on the ground as harvest residues.

Tree.—A woody plant usually having one or more perennial stems, a more or less definitely formed crown of foliage, and a height of at least 12 feet at maturity.

Upper-stem portion.—That portion of the central stem of sawtimber trees between the saw-log top and the minimum top diameter of 4.0 inches outside bark or to the point where the central stem breaks into limbs.

Veneer log.—Logs to be used in the production of plywood, finished panels, or veneer sheets, both rotary cut and sliced.

COMMON AND SCIENTIFIC NAMES OF TREE SPECIES MENTIONED IN THIS REPORT

SOFTWOODS

Cypress ..... *Taxodium distichum*
Shortleaf pine ..... *Pinus echinata*
Eastern redcedar ..... *Juniperus virginiana*

HARDWOODS

Ash
- Blue ash ..... *Fraxinus quadrangulata*
- Green ash ..... *F. pennsylvanica*
- White ash ..... *F. americana*

American basswood ..... *Tilia americana*
American sycamore ..... *Platanus occidentalis*
Beech ..... *Fagus grandifolia*
Black cherry ..... *Prunus serotina*
Black walnut ..... *Juglans nigra*
Cottonwood ..... *Populus deltoides*
Elm
- American elm ..... *Ulmus americana*
- Rock elm ..... *U. thomasii*
- Slippery elm ..... *U. rubra*
- Winged elm ..... *U. alata*

Hackberry ..... *Celtis occidentalis*
Hickory
- Bitternut hickory ..... *Carya cordiformis*
- Black hickory ..... *C. texana*
- Mockernut hickory ..... *C. tomentosa*
- Pecan ..... *C. illinoensis*
- Pignut hickory ..... *C. glabra*
- Shagbark hickory ..... *C. ovata*
- Shellbark hickory ..... *C. laciniosa*
- Water hickory ..... *C. aquatica*

Hard maple
- Black maple ..... *Acer nigrum*
- Sugar maple ..... *A. saccharum*

Soft maple
- Red maple ..... *A. rubrum*
- Silver maple ..... *A. saccharinum*

Red oak
- Black oak ..... *Quercus velutina*
- Blackjack oak ..... *Q. marilandica*
- Cherrybark oak ..... *Q. falcata* var. *pagodaefolia*
- Northern pin oak ..... *Q. ellipsoidalis*
- Northern red oak ..... *Q. rubra*
- Pin oak ..... *Q. palustris*
- Scarlet oak ..... *Q. coccinea*
- Shingle oak ..... *Q. imbricaria*
- Shumard oak ..... *Q. shumardii*
- Southern red oak ..... *Q. falcata*
- Water oak ..... *Q. nigra*
- Willow oak ..... *Q. phellos*

White oak
- Bur oak ..... *Q. macrocarpa*
- Chinkapin oak ..... *Q. muehlenbergii*
- Overcup oak ..... *Q. lyrata*
- Post oak ..... *Q. stellata*
- Swamp chestnut oak ..... *Q. michauxii*
- Swamp white oak ..... *Q. bicolor*
- White oak ..... *Q. alba*

River birch ..... *Betula nigra*
Sweetgum ..... *Liquidambar styraciflua*
Tupelo
- Black gum ..... *Nyssa sylvatica* var. *biflora*
- Black tupelo ..... *Nyssa sylvatica* var. *sylvatica*

Yellow poplar ..... *Liriodendron tulipifera*
Other hardwoods
- Black locust ..... *Robinia pseudoacacia*
- Black willow ..... *Salix nigra*
- Boxelder ..... *Acer negundo*
- Butternut ..... *Juglans cinerea*
- Common persimmon .... *Diospyros virginiana*
- Cucumbertree ..... *Magnolia acuminata*
- Honeylocust ..... *Gleditsia triacanthos*
- Kentucky coffeetree ..... *Gymnocladus dioicus*
- Ohio buckeye ..... *Aesculus glabra*
- Osage-orange ..... *Maclura pomifera*
- Sassafras ..... *Sassafras albidum*
- Sugarberry ..... *Celtus laevigata*

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Kind of mill and mill size	1946	1958	1969	1980	1987	1991	1994	1997
Sawmills								
Large [1]	2	5	7	8	13	17	32	35
Medium [2]	43	103	117	163	169	172	189	212
Small [3]	2,548	882	425	315	228	206	191	170
Total	2,593	990	549	486	410	395	412	417
Cooperage mills	85	36	36	30	20	20	12	8
Veneer mills	6	3	4	4	5	4	1	1
Pulp mills	--	2	2	2	1	1	1	1
Charcoal [4]	3	60	52	36	15	14	14	10
Handle mills	19	12	7	10	6	6	5	6
Posts	6	14	22	28	23	17	9	9
Other products [5]	94	44	9	3	11	14	7	6
Total	213	171	132	113	81	76	49	41
All mills	2,806	1,161	681	599	491	471	461	458

[1] Annual lumber production in excess of 5 million board feet.

[2] Annual lumber production from 1 million to 5 million board feet.

[3] Annual lumber production less than 1 million board feet.

[4] Includes only those charcoal operations using roundwood.

[5] Includes plants producing shavings, chips, cabin logs, rails, poles, etc.

Table 2. -- Industrial roundwood receipts by species group and State of origin, Missouri, 1997

(In thousand cubic feet)

Species group	Total	State of origin										
		Illinois	Indiana	Iowa	Kansas	Missouri	Nebraska	Arkansas	Kentucky	Ohio	Oklahoma	Other U.S
Softwoods												
Eastern redcedar	3,156	--	--	--	1	3,046	--	61	--	--	16	32
Shortleaf pine	8,720	--	--	--	--	8,654	--	66	--	--	--	--
Cypress	2	--	--	--	--	1	--	1	--	--	--	--
Total	11,878	--	--	--	1	11,701	--	128	--	--	16	32
Hardwoods												
Soft maple	3,647	200	--	102	23	3,290	3	28	--	--	--	1
Hard maple	236	100	--	1	--	127	--	--	7	--	--	1
River birch	46	--	--	--	--	46	--	--	--	--	--	--
Hickory	4,683	238	--	1	13	4,148	2	53	185	--	2	41
Hackberry	181	1	--	--	--	180	--	--	--	--	*	--
Persimmon	8	--	--	--	--	8	--	--	--	--	--	--
Ash	1,427	164	--	4	20	1,170	--	21	37	--	--	11
Honeylocust	2	--	--	--	--	2	--	--	--	--	--	--
Black walnut	3,256	67	--	3	142	2,712	25	307	--	--	--	--
Sweetgum	124	6	--	--	--	113	--	5	--	--	--	--
Yellow-poplar	268	94	--	--	--	174	--	--	--	--	--	--
Tupelo	131	--	--	--	--	128	--	4	--	--	--	--
Sycamore	2,869	91	--	40	8	2,707	--	22	--	--	2	*
Cottonwood	6,237	235	--	152	21	5,702	2	84	--	--	--	41
Black cherry	128	11	--	--	--	94	--	--	--	--	--	24
Red oak group	68,648	1,382	7	47	77	66,278	59	763	7	4	23	1
White oak group	36,289	1,689	293	43	247	33,004	--	468	426	69	10	40
Willow	3	--	--	--	--	3	--	--	--	--	--	--
Sassafras	3	--	--	--	--	3	--	--	--	--	--	--
Basswood	119	8	--	--	4	105	3	--	--	--	--	--
Elm	336	19	--	--	--	316	--	1	--	--	--	--
Kentucky coffeetree	2	--	--	--	--	2	--	--	--	--	--	--
Total	128,641	4,302	299	392	555	120,313	93	1,757	662	73	37	159
All species	140,519	4,302	299	392	556	132,014	93	1,885	662	73	53	190

* Less than 500 cubic feet.

Table 3 -- Saw-log receipts by Forest Survey Unit, species group, and State of origin, Missouri, 1997

(In thousand board feet) [1]

ALL UNITS

Species group	Total	State of origin								
		Illinois	Iowa	Kansas	Missouri	Nebraska	Arkansas	Kentucky	Oklahoma	Other U.S.
Softwoods										
Eastern redcedar	7,589	--	--	--	7,035	--	254	--	100	200
Shortleaf pine	43,403	--	--	--	43,231	--	172	--	--	--
Cypress	13	--	--	--	8	--	5	--	--	--
Total	51,004	--	--	--	50,273	--	431	--	100	200
Hardwoods										
Soft maple	20,720	1,176	267	140	18,935	17	179	--	--	6
Hard maple	1,363	586	4	--	772	--	--	--	--	--
River birch	243	--	--	--	243	--	--	--	--	--
Hickory	23,800	264	4	76	23,283	11	152	--	11	--
Hackberry	1,098	5	--	--	1,092	--	--	--	1	--
Persimmon	48	--	--	--	48	--	--	--	--	--
Ash	8,039	827	24	119	6,941	--	127	--	--	--
Honeylocust	10	--	--	--	10	--	--	--	--	--
Black walnut	15,874	436	12	927	12,389	166	1,944	--	--	--
Sweetgum	753	34	--	--	688	--	31	--	--	--
Yellow-poplar	1,629	570	--	--	1,059	--	--	--	--	--
Tupelo	799	--	--	--	776	--	23	--	--	--
Sycamore	16,283	554	7	48	15,523	--	137	--	11	3
Cottonwood	41,051	1,511	357	131	38,248	11	534	--	--	259
Black cherry	621	66	--	--	555	--	--	--	--	--
Red oak group	380,701	8,145	267	432	366,530	331	4,829	19	142	6
White oak group	166,208	7,382	205	1,383	154,463	--	1,453	1,005	66	251
Sassafras	20	--	--	--	20	--	--	--	--	--
Basswood	664	47	--	17	584	17	--	--	--	--
Elm	1,957	113	--	--	1,837	--	7	--	--	--
Kentucky coffeetree	10	--	--	--	10	--	--	--	--	--
Total	681,893	21,717	1,147	3,273	644,007	552	9,415	1,024	233	524
All species	732,897	21,717	1,147	3,273	694,281	552	9,846	1,024	333	724

EASTERN OZARK UNIT

Softwoods										
Eastern redcedar	989	--	--	--	985	--	4	--	--	--
Shortleaf pine	33,797	--	--	--	33,625	--	172	--	--	--
Cypress	5	--	--	--	--	--	5	--	--	--
Total	34,791	--	--	--	34,610	--	181	--	--	--
Hardwoods										
Soft maple	1,954	--	--	--	1,782	--	173	--	--	--
Hard maple	18	--	--	--	18	--	--	--	--	--
River birch	228	--	--	--	228	--	--	--	--	--
Hickory	13,548	--	--	--	13,406	--	142	--	--	--
Hackberry	48	--	--	--	48	--	--	--	--	--
Persimmon	48	--	--	--	48	--	--	--	--	--
Ash	1,215	--	--	--	1,088	--	127	--	--	--
Honeylocust	10	--	--	--	10	--	--	--	--	--
Black walnut	238	--	--	--	226	--	12	--	--	--
Sweetgum	563	--	--	--	532	--	31	--	--	--
Yellow-poplar	198	--	--	--	198	--	--	--	--	--
Tupelo	589	--	--	--	566	--	23	--	--	--
Sycamore	4,059	--	--	--	3,937	--	122	--	--	--
Cottonwood	1,075	--	--	--	886	--	189	--	--	--
Black cherry	40	--	--	--	40	--	--	--	--	--
Red oak group	208,541	--	--	--	203,929	--	4,611	--	--	--
White oak group	73,599	--	--	--	72,231	--	1,367	--	--	--
Sassafras	20	--	--	--	20	--	--	--	--	--
Basswood	32	--	--	--	32	--	--	--	--	--
Elm	683	--	--	--	676	--	7	--	--	--
Total	306,704	--	--	--	299,900	--	6,804	--	--	--
All species	341,495	--	--	--	334,510	--	6,985	--	--	--

(Table 3 continued on next page)

(Table 3 continued)

SOUTHWEST OZARK UNIT

Species group	Total	State of origin								
		Illinois	Iowa	Kansas	Missouri	Nebraska	Arkansas	Kentucky	Oklahoma	Other U S
Softwoods										
Eastern redcedar	4,580	--	--	--	4,030	--	250	--	100	200
Shortleaf pine	9,366	--	--	--	9,366	--	--	--	--	--
Total	13,946	--	--	--	13,396	--	250	--	100	200
Hardwoods										
Soft maple	264	--	--	--	264	--	--	--	--	--
River birch	15	--	--	--	15	--	--	--	--	--
Hickory	3,685	--	--	--	3,663	--	10	--	11	--
Hackberry	229	--	--	--	228	--	--	--	1	--
Ash	897	--	--	--	897	--	--	--	--	--
Black walnut	7,042	--	--	--	5,110	--	1,932	--	--	--
Tupelo	210	--	--	--	210	--	--	--	--	--
Sycamore	1,116	--	--	--	1,095	--	10	--	11	--
Cottonwood	66	--	--	--	66	--	--	--	--	--
Black cherry	296	--	--	--	296	--	--	--	--	--
Red oak group	73,256	--	--	--	72,897	--	217	--	142	--
White oak group	31,193	--	--	--	31,041	--	85	--	66	--
Elm	98	--	--	--	98	--	--	--	--	--
Total	118,368	--	--	--	115,880	--	2,255	--	233	--
All species	132,313	--	--	--	129,276	--	2,505	--	333	200

NORTHWEST OZARK UNIT

Softwoods										
Eastern redcedar	902	--	--	--	902	--	--	--	--	--
Total	902	--	--	--	902	--	--	--	--	--
Hardwoods										
Soft maple	801	--	--	11	790	--	--	--	--	--
Hickory	1,429	--	--	2	1,427	--	--	--	--	--
Ash	571	--	--	--	571	--	--	--	--	--
Black walnut	107	--	--	--	107	--	--	--	--	--
Sycamore	1,636	--	--	1	1,634	--	--	--	--	--
Black cherry	35	--	--	--	35	--	--	--	--	--
Red oak group	13,865	--	--	5	13,860	--	--	--	--	--
White oak group	11,221	--	--	3	11,218	--	--	--	--	--
Elm	227	--	--	--	227	--	--	--	--	--
Total	29,891	--	--	23	29,868	--	--	--	--	--
All species	30,793	--	--	23	30,770	--	--	--	--	--

(Table 3 continued on next page)

(Table 3 continued)

PRAIRIE UNIT

Species group	Total	State of origin								
		Illinois	Iowa	Kansas	Missouri	Nebraska	Arkansas	Kentucky	Oklahoma	Other U.S.
Hardwoods										
Soft maple	13,379	1,060	267	129	11,906	17	--	--	--	--
Hard maple	859	359	4	--	496	--	--	--	--	--
Hickory	3,572	132	4	74	3,351	11	--	--	--	--
Hackberry	810	5	--	--	805	--	--	--	--	--
Ash	3,268	435	24	119	2,689	--	--	--	--	--
Black walnut	6,312	275	12	927	4,932	166	--	--	--	--
Sycamore	7,170	434	7	47	6,682	--	--	--	--	--
Cottonwood	32,161	508	357	131	31,154	11	--	--	--	--
Red oak group	48,880	3,091	267	428	44,763	331	--	--	--	--
White oak group	23,775	1,406	205	1,379	20,784	--	--	--	--	--
Basswood	632	47	--	17	552	17	--	--	--	--
Elm	635	113	--	--	522	--	--	--	--	--
Kentucky coffeetree	10	--	--	--	10	--	--	--	--	--
Total	141,461	7,865	1,147	3,251	128,647	552	--	--	--	--
All species	141,461	7,865	1,147	3,251	128,647	552	--	--	--	--

RIVERBORDER UNIT

Softwoods										
Eastern redcedar	1,118	--	--	--	1,118	--	--	--	--	--
Shortleaf pine	240	--	--	--	240	--	--	--	--	--
Cypress	8	--	--	--	8	--	--	--	--	--
Total	1,366	--	--	--	1,366	--	--	--	--	--
Hardwoods										
Soft maple	4,322	116	--	--	4,194	--	7	--	--	6
Hard maple	486	228	--	--	258	--	--	--	--	--
Hickory	1,567	131	--	--	1,436	--	--	--	--	--
Hackberry	10	*	--	--	10	--	--	--	--	--
Ash	2,088	392	--	--	1,697	--	--	--	--	--
Black walnut	2,175	161	--	--	2,014	--	--	--	--	--
Sweetgum	190	34	--	--	156	--	--	--	--	--
Yellow-poplar	1,431	570	--	--	861	--	--	--	--	--
Sycamore	2,302	120	--	--	2,175	--	4	--	--	3
Cottonwood	7,750	1,003	--	--	6,142	--	345	--	--	259
Black cherry	251	66	--	--	185	--	--	--	--	--
Red oak group	36,160	5,054	--	--	31,081	--	--	19	--	6
White oak group	26,421	5,976	--	--	19,189	--	--	1,005	--	251
Elm	315	--	--	--	315	--	--	--	--	--
Total	85,469	13,852	--	--	69,712	--	356	1,024	--	524
All species	86,834	13,852	--	--	71,078	--	356	1,024	--	524

* Less than 500 board feet.

[1] International 1/4-inch rule.

Table 4. -- Industrial roundwood production by product and softwoods and hardwoods, Missouri, 1946, 1958, 1969, 1980, 1987, 1991, 1994, and 1997

(In million cubic feet)

Product	Year of survey							
	1946	1958	1969	1980	1987	1991	1994	1997
SOFTWOODS								
Saw logs	8.3	4.1	3.3	5.5	7.8	7.5	9.3	9.5
Cooperage logs	--	--	--	--	--	--	--	--
Veneer logs	--	--	--	--	--	--	*	*
Pulpwood	0.1	0.1	--	--	--	--	*	0.1
Charcoal	--	--	--	--	--	--	*	*
Handle bolts	--	--	--	--	--	--	--	--
Poles	*	0.2	0.3	--	*	--	--	--
Posts	3.2	0.8	1.2	0.5	0.7	2.6	0.9	1.1
Mine timbers	*	*	--	--	--	--	--	--
Fuelwood [1]	0.2	0.2	0.1	--	--	*	--	--
Other products [2]	*	*	0.3	0.2	0.6	1.7	1.8	1.1
Total	11.8	5.4	5.2	6.2	9.1	11.8	12.1	11.9
HARDWOODS								
Saw logs	71.1	43.7	63.0	66.2	81.9	86.2	110.7	115.5
Cooperage logs	14.9	4.5	8.9	4.7	2.0	4.8	4.2	5.1
Veneer logs	1.4	1.0	1.0	0.7	1.0	1.7	1.1	1.0
Pulpwood	0.5	0.7	1.9	1.9	2.2	1.2	1.5	4.2
Charcoal	0.6	3.2	16.7	6.2	2.7	4.6	2.4	1.2
Handle bolts	1.3	1.2	0.4	--	0.1	0.2	0.2	0.3
Poles	--	--	*	--	0.1	--	--	--
Posts	7.8	8.8	1.3	1.2	0.6	0.5	0.2	0.3
Mine timbers	3.4	0.5	0.1	--	--	--	--	--
Fuelwood [1]	59.2	61.7	24.4	--	--	--	--	--
Other products [2]	2.2	5.7	0.7	0.4	0.2	10.4	0.3	0.2
Total	162.4	131.0	118.4	81.3	90.8	109.6	120.5	127.7
All products	174.2	136.4	123.6	87.5	99.9	121.4	132.6	139.6

* Less than 50,000 cubic feet.

[1] Does not include residential fuelwood.

[2] Includes shavings, chips, cabin logs, rails, etc.

Table 5. -- Industrial roundwood production by Forest Survey Unit, species group, and product, Missouri, 1997 [1]

ALL UNITS

Species group	Saw logs		Veneer logs		Pulpwood		Charcoal		Cooperage		Handles		Posts		Other products	All products
	MBF [2]	MCF [3]	MBF [2]	MCF [3]	Cords [4]	MCF [3]	Cords 4/	MCF [3]	MBF [2]	MCF [3]	MBF [2]	MCF [3]	M pieces	MCF [3]	MCF [3]	MCF [3]
Softwoods																
Eastern redcedar	7,125	1,932	26	6	--	--	--	--	--	--	--	--	160	123	1,015	3,077
Shortleaf pine	43,633	7,579	--	--	--	--	473	33	--	--	--	--	1,321	1,018	94	8,723
Cypress	8	1	--	--	--	--	--	--	--	--	--	--	--	--	--	1
Other softwoods	--	--	--	--	1,342	106	--	--	--	--	--	--	--	--	--	106
Total	50,765	9,513	26	6	1,342	106	473	33	--	--	--	--	1,481	1,141	1,109	11,908
Hardwoods																
Soft maple	19,902	3,278	--	--	7,592	600	--	--	--	--	--	--	--	--	37	3,914
Hard maple	778	128	46	11	33	3	--	--	--	--	--	--	--	--	--	141
River birch	247	41	--	--	4,985	394	--	--	--	--	--	--	--	--	6	440
Hickory	24,024	3,957	--	--	2,011	159	687	48	--	--	1,555	250	23	13	2	4,429
Hackberry	1,134	187	--	--	5,434	429	--	--	--	--	--	--	--	--	--	616
Persimmon	48	8	--	--	--	--	--	--	--	--	--	--	--	--	--	8
Ash	8,037	1,324	2	*	3,346	264	--	--	--	--	84	13	23	13	--	1,615
Honeylocust	10	2	--	--	--	--	--	--	--	--	--	--	--	--	--	2
Black walnut	14,972	3,277	1,189	258	--	--	--	--	--	--	--	--	--	--	--	3,535
Sweetgum	1,138	187	--	--	--	--	--	--	--	--	--	--	--	--	--	187
Yellow-poplar	1,412	233	--	--	--	--	--	--	--	--	--	--	--	--	--	233
Tupelo	776	128	--	--	41	3	--	--	--	--	--	--	--	--	--	131
Sycamore	15,552	2,561	--	--	1,181	93	--	--	--	--	--	--	23	13	47	2,715
Cottonwood	39,541	5,591	--	--	8,987	710	--	--	--	--	--	--	--	--	58	6,359
Black cherry	570	94	137	31	--	--	35	2	--	--	--	--	--	--	--	128
Red oak group	370,903	66,021	247	56	7,026	555	12,477	873	--	--	--	--	266	153	9	67,668
White oak group	157,672	28,066	2,589	592	7,667	606	3,741	262	30,740	5,066	49	8	245	141	7	34,747
Willow	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	3
Sassafras	20	3	--	--	--	--	--	--	--	--	--	--	--	--	--	3
Basswood	627	103	--	--	--	--	--	--	--	--	--	--	--	--	9	112
Elm	1,861	307	2	*	5,375	425	--	--	--	--	--	--	23	13	--	745
Kentucky coffeetree	10	2	--	--	--	--	--	--	--	--	--	--	--	--	--	2
Total	659,235	115,496	4,212	949	53,679	4,241	16,940	1,186	30,740	5,066	1,688	272	604	348	178	127,735
All species	710,000	125,009	4,237	955	55,020	4,347	17,413	1,219	30,740	5,066	1,688	272	2,086	1,489	1,287	139,643

(Table 5 continued on next page)

(Table 5 continued)

EASTERN OZARK UNIT

Species group	Saw logs		Veneer logs		Pulpwood		Charcoal		Cooperage		Handles		Posts		Other products	All products
	MBF [2]	MCF [3]	MBF [2]	MCF [3]	Cords [4]	MCF [3]	Cords 4/	MCF [3]	MBF [2]	MCF [3]	MBF [2]	MCF [3]	M pieces	MCF [3]	MCF [3]	MCF [3]
Softwoods																
Eastern redcedar	955	259	--	--	--	--	--	--	--	--	--	--	72	55	23	337
Shortleaf pine	31,555	5,481	--	--	--	--	236	17	--	--	--	--	680	524	--	6,022
Other softwoods	--	--	--	--	1,342	106	--	--	--	--	--	--	--	--	--	106
Total	32,510	5,740	--	--	1,342	106	236	17	--	--	--	--	752	579	23	6,465
Hardwoods																
Soft maple	1,695	279	--	--	2,431	192	--	--	--	--	--	--	--	--	--	471
Hard maple	72	12	31	7	--	--	--	--	--	--	--	--	--	--	--	19
River birch	234	39	--	--	2,304	182	--	--	--	--	--	--	--	--	--	221
Hickory	12,867	2,119	--	--	788	62	5	*	--	--	179	29	--	--	2	2,212
Hackberry	54	9	--	--	2,512	198	--	--	--	--	--	--	--	--	--	207
Persimmon	48	8	--	--	--	--	--	--	--	--	--	--	--	--	--	8
Ash	1,642	270	--	--	2,885	228	--	--	--	--	34	5	--	--	--	504
Honeylocust	10	2	--	--	--	--	--	--	--	--	--	--	--	--	--	2
Black walnut	1,427	312	22	5	--	--	--	--	--	--	--	--	--	--	--	317
Sweetgum	619	102	--	--	--	--	--	--	--	--	--	--	--	--	--	102
Yellow-poplar	368	61	--	--	--	--	--	--	--	--	--	--	--	--	--	61
Tupelo	544	90	--	--	--	--	--	--	--	--	--	--	--	--	--	90
Sycamore	3,657	602	--	--	--	--	--	--	--	--	--	--	--	--	--	602
Cottonwood	972	137	--	--	2,556	202	--	--	--	--	--	--	--	--	--	339
Black cherry	106	17	91	21	--	--	--	--	--	--	--	--	--	--	--	38
Red oak group	189,493	33,730	--	--	4,006	317	6,073	425	--	--	--	--	47	27	9	34,508
White oak group	66,554	11,847	--	--	4,331	342	1,446	101	7,912	1,304	--	--	28	16	7	13,617
Sassafras	20	3	--	--	--	--	--	--	--	--	--	--	--	--	--	3
Basswood	2	*	--	--	--	--	--	--	--	--	--	--	--	--	--	*
Elm	699	115	--	--	2,392	189	--	--	--	--	--	--	--	--	--	304
Total	281,083	49,755	144	33	24,205	1,912	7,524	527	7,912	1,304	213	34	75	43	19	53,626
All species	313,593	55,495	144	33	25,547	2,018	7,760	543	7,912	1,304	213	34	827	622	42	60,091

SOUTHWEST OZARK UNIT

Softwoods																
Eastern redcedar	4,232	1,148	--	--	--	--	--	--	--	--	--	--	88	68	103	1,318
Shortleaf pine	10,687	1,856	--	--	--	--	237	17	--	--	--	--	537	414	94	2,380
Total	14,919	3,004	--	--	--	--	237	17	--	--	--	--	625	481	197	3,699
Hardwoods																
Soft maple	274	45	--	--	--	--	--	--	--	--	--	--	--	--	5	50
River birch	2	*	--	--	--	--	--	--	--	--	--	--	--	--	--	*
Hickory	4,530	746	--	--	1,182	93	642	45	--	--	10	2	--	--	--	886
Hackberry	166	27	--	--	--	--	--	--	--	--	--	--	--	--	--	27
Ash	803	132	--	--	461	36	--	--	--	--	5	1	--	--	--	169
Black walnut	3,012	659	103	22	--	--	--	--	--	--	--	--	--	--	--	682
Sweetgum	319	53	--	--	--	--	--	--	--	--	--	--	--	--	--	53
Yellow-poplar	265	44	--	--	--	--	--	--	--	--	--	--	--	--	--	44
Tupelo	232	38	--	--	--	--	--	--	--	--	--	--	--	--	--	38
Sycamore	1,043	172	--	--	--	--	--	--	--	--	--	--	--	--	21	193
Cottonwood	244	35	--	--	--	--	--	--	--	--	--	--	--	--	--	35
Black cherry	154	25	11	2	--	--	--	--	--	--	--	--	--	--	--	28
Red oak group	78,862	14,037	11	3	2,933	232	4,021	281	--	--	--	--	24	14	--	14,567
White oak group	31,881	5,675	14	3	3,171	250	1,621	113	2,497	412	49	8	23	13	--	6,474
Basswood	3	*	--	--	--	--	--	--	--	--	--	--	--	--	--	*
Elm	91	15	--	--	--	--	--	--	--	--	--	--	--	--	--	15
Total	121,880	21,704	139	31	7,747	612	6,284	440	2,497	412	64	10	47	27	26	23,261
All species	136,799	24,708	139	31	7,747	612	6,521	456	2,497	412	64	10	672	508	223	26,960

(Table 5 continued on next page)

(Table 5 continued)

NORTHWEST OZARK UNIT

Species group	Saw logs		Veneer logs		Pulpwood		Charcoal		Cooperage		Handles		Posts		Other products	All products
	MBF [2]	MCF [3]	MBF [2]	MCF [3]	Cords [4]	MCF [3]	Cords 4/	MCF [3]	MBF [2]	MCF [3]	MBF [2]	MCF [3]	M pieces	MCF [3]	MCF [3]	MCF [3]
Softwoods																
Eastern redcedar	772	209	5	1	--	--	--	--	--	--	--	--	--	--	416	627
Shortleaf pine	744	129	--	--	--	--	--	--	--	--	--	--	104	80	--	209
Total	1,516	338	5	1	--	--	--	--	--	--	--	--	104	80	416	836
Hardwoods																
Soft maple	779	128	--	--	--	--	--	--	--	--	--	--	--	--	7	135
River birch	7	1	--	--	--	--	--	--	--	--	--	--	--	--	--	1
Hickory	1,885	311	--	--	--	--	--	--	--	--	--	--	23	13	--	324
Hackberry	7	1	--	--	--	--	--	--	--	--	--	--	--	--	--	1
Ash	842	139	--	--	--	--	--	--	--	--	--	--	23	13	--	152
Black walnut	950	208	55	12	--	--	--	--	--	--	--	--	--	--	--	220
Sycamore	2,221	366	--	--	--	--	--	--	--	--	--	--	23	13	4	383
Cottonwood	804	114	--	--	--	--	--	--	--	--	--	--	--	--	11	124
Black cherry	132	22	--	--	--	--	--	--	--	--	--	--	--	--	--	22
Red oak group	27,260	4,852	--	--	--	--	2,378	166	--	--	--	--	195	112	--	5,131
White oak group	18,890	3,362	71	16	--	--	669	47	6,930	1,142	--	--	194	112	--	4,679
Elm	239	39	--	--	--	--	--	--	--	--	--	--	23	13	--	53
Total	54,017	9,543	125	28	--	--	3,047	213	6,930	1,142	--	--	483	278	21	11,226
All species	55,533	9,882	130	29	--	--	3,047	213	6,930	1,142	--	--	587	358	438	12,062

PRAIRIE UNIT

Softwoods																
Eastern redcedar	21	6	--	--	--	--	--	--	--	--	--	--	--	--	3	9
Total	21	6	--	--	--	--	--	--	--	--	--	--	--	--	3	9
Hardwoods																
Soft maple	14,245	2,346	--	--	1,796	142	--	--	--	--	--	--	--	--	17	2,506
Hard maple	462	76	10	2	33	3	--	--	--	--	--	--	--	--	--	81
River birch	4	1	--	--	--	--	--	--	--	--	--	--	--	--	4	5
Hickory	3,185	525	--	--	41	3	40	3	--	--	383	62	--	--	--	592
Hackberry	891	147	--	--	--	--	--	--	--	--	--	--	--	--	--	147
Ash	2,753	453	2	*	--	--	--	--	--	--	38	6	--	--	--	460
Black walnut	8,081	1,769	789	171	--	--	--	--	--	--	--	--	--	--	--	1,940
Tupelo	--	--	--	--	41	3	--	--	--	--	--	--	--	--	--	3
Sycamore	5,975	984	--	--	823	65	--	--	--	--	--	--	--	--	7	1,056
Cottonwood	26,691	3,774	--	--	2,520	199	--	--	--	--	--	--	--	--	25	3,998
Black cherry	5	1	3	1	--	--	35	2	--	--	--	--	--	--	--	4
Red oak group	43,295	7,706	191	44	86	7	5	*	--	--	--	--	--	--	--	7,757
White oak group	19,939	3,549	1,656	379	165	13	5	*	6,401	1,055	--	--	--	--	--	4,996
Willow	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	2
Basswood	591	97	--	--	--	--	--	--	--	--	--	--	--	--	7	105
Elm	483	80	2	*	200	16	--	--	--	--	--	--	--	--	--	96
Kentucky coffeetree	10	2	--	--	--	--	--	--	--	--	--	--	--	--	--	2
Total	126,610	21,510	2,652	597	5,705	451	85	6	6,401	1,055	422	68	--	--	63	23,749
All species	126,631	21,515	2,652	597	5,705	451	85	6	6,401	1,055	422	68	--	--	66	23,758

(Table 5 continued on next page)

(Table 5 continued)

RIVERBORDER UNIT

Species group	Saw logs		Veneer logs		Pulpwood		Charcoal		Cooperage		Handles		Posts		Other products	All products
	MBF [2]	MCF [3]	MBF [2]	MCF [3]	Cords [4]	MCF [3]	Cords 4/	MCF [3]	MBF [2]	MCF [3]	MBF [2]	MCF [3]	M pieces	MCF [3]	MCF [3]	MCF [3]
Softwoods																
Eastern redcedar	1,146	311	20	5	--	--	--	--	--	--	--	--	--	--	470	786
Shortleaf pine	647	112	--	--	--	--	--	--	--	--	--	--	--	--	--	112
Cypress	8	1	--	--	--	--	--	--	--	--	--	--	--	--	--	1
Total	1,800	424	20	5	--	--	--	--	--	--	--	--	--	--	470	899
Hardwoods																
Soft maple	2,908	479	--	--	3,365	266	--	--	--	--	--	--	--	--	7	752
Hard maple	245	40	6	1	--	--	--	--	--	--	--	--	--	--	--	42
River birch	--	--	--	--	2,681	212	--	--	--	--	--	--	--	--	1	213
Hickory	1,558	257	--	--	--	--	--	--	--	--	983	158	--	--	--	415
Hackberry	17	3	--	--	2,922	231	--	--	--	--	--	--	--	--	--	234
Ash	1,997	329	--	--	--	--	--	--	--	--	7	1	--	--	--	330
Black walnut	1,502	329	221	48	--	--	--	--	--	--	--	--	--	--	--	377
Sweetgum	200	33	--	--	--	--	--	--	--	--	--	--	--	--	--	33
Yellow-poplar	779	128	--	--	--	--	--	--	--	--	--	--	--	--	--	128
Sycamore	2,655	437	--	--	358	28	--	--	--	--	--	--	--	--	15	481
Cottonwood	10,830	1,531	--	--	3,912	309	--	--	--	--	--	--	--	--	23	1,863
Black cherry	173	29	32	7	--	--	--	--	--	--	--	--	--	--	--	36
Red oak group	31,994	5,695	44	10	--	--	--	--	--	--	--	--	--	--	--	5,705
White oak group	20,407	3,633	848	194	--	--	--	--	6,999	1,153	--	--	--	--	--	4,980
Willow	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1
Basswood	30	5	--	--	--	--	--	--	--	--	--	--	--	--	1	6
Elm	349	57	--	--	2,783	220	--	--	--	--	--	--	--	--	--	277
Total	75,644	12,985	1,152	261	16,021	1,266	--	--	6,999	1,153	990	159	--	--	49	15,872
All species	77,444	13,409	1,172	265	16,021	1,266	--	--	6,999	1,153	990	159	--	--	519	16,772

* Less than 1/2 unit of measure.

[1] Based on factore obtained from the Missouri Logging Utilization Study, 1987, and other regional utilization studies

[2] Thousand board feet, Internation 1/4-inch rule.

[3] Thousand cubic feet

[4] Standard cords are 128 cubic feet consisting of 79 cubic feet of wood and 49 cubic feet of bark and air space

Table 8. -- Industrial roundwood production by Forest Survey Unit, county, and species group, Missouri, 1997

(In thousand cubic feet)

Forest Survey Unit and county	All species	Species group												
		Eastern redcedar	Shortleaf pine	Cypress	Other softwoods	Soft maple	Hard maple	River birch	Hickory	Hackberry	Persimmon	Ash	Honey-locust	Black walnut
Eastern Ozark Unit														
Bollinger	2,948	--	4	--	--	87	8	17	150	17	--	58	--	13
Butler	2,592	--	808	--	--	24	--	30	104	*	--	31	--	22
Carter	3,121	--	849	--	--	1	--	--	138	--	--	14	--	21
Crawford	4,430	7	153	--	--	44	1	--	181	--	--	33	--	10
Dent	4,702	47	365	--	--	--	--	1	142	1	--	3	--	21
Iron	4,451	43	239	--	--	33	2	--	178	--	--	3	--	12
Madison	2,665	17	219	--	53	89	1	54	84	59	--	71	--	22
Oregon	5,898	10	398	--	--	2	--	--	191	2	--	30	--	57
Reynolds	8,314	19	770	--	--	4	1	--	214	--	--	8	--	22
Ripley	5,207	--	384	--	--	47	2	--	305	8	8	83	2	31
Shannon	7,472	33	1,102	--	--	--	--	--	281	--	--	*	--	51
St. Francois	738	37	24	--	--	10	1	--	28	--	--	8	--	5
Washington	3,798	107	440	--	--	13	1	--	85	--	--	*	--	10
Wayne	5,961	18	468	--	53	156	2	119	214	122	--	181	--	22
Total	80,091	337	8,022	--	108	471	19	221	2,212	207	8	504	2	317
Southwest Ozark Unit														
Barry	1,394	164	79	--	--	5	--	--	72	--	--	19	--	122
Christian	1,474	52	38	--	--	--	--	--	23	--	--	5	--	71
Douglas	4,185	118	333	--	--	--	--	--	120	--	--	23	--	33
Howell	5,059	--	243	--	--	23	--	--	218	--	--	31	--	35
McDonald	1,837	10	13	--	--	--	--	--	99	17	--	17	--	92
Newton	948	--	18	--	--	--	--	--	18	10	--	15	--	125
Ozark	1,329	138	89	--	--	1	--	--	47	--	--	19	--	33
Stone	668	105	104	--	--	--	--	--	20	--	--	--	--	43
Taney	1,142	888	--	--	--	--	--	--	32	--	--	13	--	31
Texas	5,844	45	1,319	--	--	19	--	*	144	*	--	12	--	38
Webster	546	--	23	--	--	--	--	--	18	--	--	1	--	31
Wright	2,554	--	121	--	--	1	--	--	78	--	--	14	--	31
Total	28,980	1,318	2,380	--	--	50	--	*	886	27	--	169	--	882
Northwest Ozark Unit														
Benton	430	77	--	--	--	3	--	--	3	--	--	--	--	11
Camden	1,090	79	--	--	--	2	--	--	22	--	--	3	--	20
Cedar	680	--	--	--	--	80	--	--	21	--	--	39	--	2
Dallas	299	--	--	--	--	--	--	--	1	--	--	1	--	11
Hickory	354	113	--	--	--	--	--	--	4	--	--	--	--	11
Laclede	1,771	24	41	--	--	--	--	--	44	--	--	27	--	22
Maries	1,737	158	13	--	--	33	--	--	88	--	--	27	--	22
Miller	788	43	--	--	--	5	--	--	8	--	--	17	--	35
Morgan	409	83	--	--	--	4	--	--	9	--	--	*	--	2
Phelps	1,741	--	94	--	--	18	--	1	87	1	--	12	--	21
Polk	302	--	--	--	--	--	--	--	1	--	--	1	--	40
Pulaski	1,920	31	81	--	--	4	--	*	80	*	--	23	--	21
St Clair	582	20	--	--	--	8	--	--	19	--	--	2	--	3
Total	12,082	627	209	--	--	135	--	1	324	1	--	152	--	220

(Table 8 continued on next page)

(Table 6 continued)

Forest Survey Unit and county	All species	Species group												
		Eastern redcedar	Shortleaf pine	Cypress	Other softwoods	Soft maple	Hard maple	River birch	Hickory	Hackberry	Persimmon	Ash	Honey-locust	Black walnut
Prairie Unit														
Adair	394	–	–	–	–	27	2	–	6	*	–	7	–	17
Andrew	165	–	–	–	–	25	8	–	2	–	–	*	–	67
Atchison	316	–	–	–	–	12	–	–	2	–	–	2	–	40
Audrain	514	–	–	–	–	29	–	–	16	1	–	19	–	40
Barton	931	–	–	–	–	113	–	–	33	40	–	53	–	58
Bates	396	–	–	–	–	6	–	–	19	–	–	5	–	37
Buchanan	223	–	–	–	–	19	8	–	59	–	–	1	–	101
Caldwell	374	–	–	–	–	65	–	–	7	1	–	7	–	5
Carroll	503	–	–	–	–	63	–	–	2	14	–	5	–	21
Cass	55	–	–	–	–	8	–	–	1	–	–	1	–	26
Chariton	1,642	–	–	–	–	162	–	–	21	–	–	22	–	68
Clark	718	–	–	–	–	99	1	*	19	1	–	24	–	36
Clay	102	1	–	–	–	17	–	–	1	6	–	1	–	11
Clinton	223	–	–	–	–	20	–	–	7	4	–	3	–	14
Cooper	219	–	–	–	–	37	–	1	1	–	–	2	–	65
Dade	360	–	–	–	–	–	–	–	6	–	–	3	–	133
Daviess	826	–	–	–	–	172	–	–	18	12	–	12	–	12
De Kalb	378	–	–	–	–	47	–	–	6	3	–	4	–	61
Gentry	185	–	–	–	–	24	–	–	*	2	–	5	–	16
Greene	412	–	–	–	–	–	–	–	*	–	–	*	–	231
Grundy	357	–	–	–	–	87	–	–	10	12	–	8	–	5
Harrison	438	–	–	–	–	60	–	–	4	4	–	8	–	67
Henry	323	–	–	–	–	15	–	–	27	–	–	11	–	–
Holt	179	–	–	–	–	12	–	–	2	2	–	2	–	40
Jackson	22	1	–	–	–	3	–	–	1	–	–	–	–	*
Jasper	296	–	–	–	–	–	–	–	–	8	–	12	–	39
Johnson	18	–	–	–	–	7	–	–	–	–	–	1	–	*
Knox	561	–	–	–	–	33	2	–	6	–	–	4	–	11
Lafayette	198	–	–	–	–	53	–	1	1	4	–	5	–	*
Lawrence	668	–	–	–	–	–	–	–	5	–	–	3	–	167
Lewis	852	–	–	–	–	126	4	–	3	–	–	8	–	35
Lincoln	708	–	–	–	–	71	10	–	32	1	–	56	–	32
Linn	579	–	–	–	–	112	–	–	2	–	–	6	–	16
Livingston	631	–	–	–	–	147	–	–	12	13	–	13	–	23
Macon	749	–	–	–	–	52	2	–	9	–	–	10	–	27
Marion	557	–	–	–	–	28	5	–	15	–	–	3	–	33
Mercer	255	–	–	–	–	42	–	–	5	3	–	8	–	8
Monroe	858	6	–	–	–	42	7	–	22	–	–	16	–	27
Nodaway	78	–	–	–	–	19	–	–	*	–	–	*	–	16
Pettis	62	–	–	–	–	9	–	–	5	–	–	1	–	–
Pike	1,321	–	–	–	–	102	23	–	23	1	–	28	–	50
Platte	32	1	–	–	–	10	–	–	–	–	–	–	–	11
Putnam	283	–	–	–	–	12	–	–	38	*	–	2	–	2
Ralls	734	–	–	–	–	42	11	–	25	1	–	18	–	38
Randolph	1,811	–	–	–	–	105	1	–	24	*	–	21	–	66
Ray	188	–	–	–	–	52	–	–	2	4	–	3	–	2
Saline	357	–	–	–	–	86	–	1	1	–	–	3	–	44
Schuyler	94	–	–	–	–	24	–	–	*	*	–	2	–	5
Scotland	389	–	–	–	–	49	–	*	18	1	–	5	–	13
Shelby	433	–	–	–	–	39	2	–	9	–	–	7	–	28
Sullivan	271	–	–	–	–	39	–	–	18	*	–	5	–	2
Vernon	555	–	–	–	–	21	–	–	40	7	–	14	–	26
Worth	148	–	–	–	–	18	–	–	3	1	–	2	–	40
Total	23,758	9	–	–	–	2,506	81	5	592	147	–	460	–	1,940
Riverborder Unit														
Boone	799	19	–	–	–	33	–	–	20	*	–	12	–	21
Callaway	833	76	–	–	–	43	1	–	10	*	–	11	–	12
Cape Girardeau	1,671	–	–	–	–	20	19	–	102	1	–	49	–	55
Cole	274	118	–	–	–	1	–	–	2	–	–	5	–	2
Dunklin	127	–	–	1	–	11	–	–	2	–	–	2	–	–
Franklin	567	19	1	–	–	5	–	–	22	–	–	8	–	1
Gasconade	1,252	102	85	–	–	48	–	–	16	–	–	4	–	16
Howard	1,399	–	–	–	–	173	–	1	18	*	–	24	–	16
Jefferson	1,031	56	32	–	–	3	3	–	11	–	–	12	–	4
Mississippi	29	–	–	–	–	6	–	5	–	6	–	–	–	–
Moniteau	236	180	–	–	–	3	–	–	2	–	–	1	–	*
Montgomery	546	40	–	–	–	34	5	–	–	1	–	11	–	14
New Madrid	1,385	–	–	–	–	221	–	206	–	225	–	4	–	68
Osage	1,495	138	1	–	–	17	*	–	3	–	–	44	–	14
Pemiscot	133	–	–	–	–	3	–	–	–	–	–	–	–	–
Perry	1,659	13	3	–	–	15	11	–	103	1	–	50	–	92
Scott	203	–	–	–	–	*	2	–	1	*	–	13	–	2
St. Charles	886	*	–	–	–	34	*	–	25	–	–	28	–	12
St. Louis	243	*	–	–	–	7	–	–	9	–	–	3	–	5
Ste Genevieve	833	22	10	–	–	12	2	–	28	–	–	18	–	17
Stoddard	368	–	–	–	–	14	*	–	23	–	–	12	–	*
Warren	600	1	–	–	–	51	–	–	24	–	–	20	–	21
Total	16,772	786	112	1	–	752	42	213	415	234	–	330	–	377
State total	139,643	3,077	8,723	1	106	3,914	141	440	4,429	818	8	1,815	2	3,535

(Table 8 continued on next page)

(Table 8 continued)

Forest Survey Unit and county	Species group												
	Sweetgum	Yellow-poplar	Tupelo	Sycamore	Cottonwood	Black cherry	Red oak group	White oak group	Willow	Sassafras	Basswood	Elm	Kentucky coffeetree
Eastern Ozark Unit													
Bollinger	46	18	--	58	30	10	1,439	992	--	--	*	20	--
Butler	13	--	1	84	24	*	1,057	407	--	--	--	7	--
Carter	*	--	5	12	1	*	1,891	579	--	--	--	8	--
Crawford	--	--	--	75	30	*	2,400	1,475	--	--	--	42	--
Dent	--	--	--	56	3	1	2,859	1,203	--	--	--	--	--
Iron	--	7	--	56	11	1	3,055	805	--	--	--	7	--
Madison	1	9	--	38	87	3	1,191	854	--	--	--	71	--
Oregon	*	--	38	85	4	18	3,890	1,189	--	2	--	1	--
Reynolds	*	5	--	44	4	1	4,424	798	--	--	--	3	--
Ripley	28	14	5	44	20	*	2,849	1,388	--	2	--	11	--
Shannon	--	--	25	8	7	*	4,389	1,594	--	--	--	3	--
St. Francois	--	1	--	15	8	1	383	220	--	--	--	--	--
Washington	--	--	--	12	3	*	2,125	1,012	--	--	--	7	--
Wayne	18	5	16	57	128	1	2,955	1,305	--	--	--	124	--
Total	102	61	90	802	339	38	34,508	13,817	--	3	*	304	--
Southwest Ozark Unit													
Barry	30	23	--	21	12	1	546	300	--	--	--	--	--
Christian	--	--	--	5	--	*	986	294	--	--	--	--	--
Douglas	--	--	1	34	--	2	2,338	1,181	--	--	--	5	--
Howell	--	--	1	35	11	11	3,332	1,117	--	--	--	--	--
McDonald	21	21	--	29	9	--	1,034	476	--	--	--	--	--
Newton	--	--	--	38	--	--	458	286	--	--	--	--	--
Ozark	--	--	--	4	--	*	655	342	--	--	--	--	--
Stone	--	--	18	4	--	*	280	94	--	--	--	--	--
Taney	--	--	--	--	--	*	158	222	--	--	--	--	--
Texas	--	--	20	18	2	8	2,807	1,405	--	--	--	10	--
Webster	--	--	--	2	--	*	307	184	--	--	--	--	--
Wright	1	--	--	3	--	5	1,687	834	--	--	*	--	--
Total	53	44	38	193	35	28	14,587	8,474	--	--	*	15	--
Northwest Ozark Unit													
Benton	--	--	--	2	4	*	111	217	--	--	--	--	--
Camden	--	--	--	13	--	2	459	488	--	--	--	2	--
Cedar	--	--	--	48	3	--	303	183	--	--	--	2	--
Dallas	--	--	--	2	--	*	72	213	--	--	--	--	--
Hickory	--	--	--	--	--	*	54	172	--	--	--	--	--
Laclede	--	--	--	80	--	5	832	699	--	--	--	17	--
Manes	--	--	--	96	--	2	746	558	--	--	--	19	--
Miller	--	--	--	36	109	4	257	253	--	--	--	--	--
Morgan	--	--	--	2	8	1	174	125	--	--	--	--	--
Phelps	--	--	--	55	--	1	833	833	--	--	--	8	--
Polk	--	--	--	1	--	*	28	230	--	--	--	--	--
Pulaski	--	--	--	68	--	8	1,133	507	--	--	--	4	--
St. Clair	--	--	--	*	--	--	129	401	--	--	--	--	--
Total	--	--	--	383	124	22	5,131	4,879	--	--	--	53	--

(Table 8 continued on next page)

(Table 8 continued)

Forest Survey Unit and county	Species group												
	Sweetgum	Yellow-poplar	Tupelo	Sycamore	Cottonwood	Black cherry	Red oak group	White oak group	Willow	Sassafras	Basswood	Elm	Kentucky coffeetree
Prairie Unit													
Adair	–	–	–	8	28	–	123	173	–	–	3	–	–
Andrew	–	–	–	*	28	–	18	15	–	–	3	–	*
Atchison	–	–	–	18	143	–	87	12	–	–	3	–	–
Audrain	–	–	–	23	40	–	207	133	–	–	2	1	–
Barton	–	–	–	113	32	–	281	207	–	–	–	–	–
Bates	–	–	–	51	11	–	177	88	–	–	–	2	–
Buchanan	–	–	–	*	11	–	7	12	–	–	5	–	*
Caldwell	–	–	–	9	110	–	110	38	–	–	–	1	*
Carroll	–	–	–	33	215	–	89	55	–	–	–	4	–
Cass	–	–	–	–	4	–	9	7	–	–	–	–	–
Chanton	–	–	–	22	537	–	680	131	–	–	–	–	–
Clark	–	–	3	23	193	*	141	166	–	–	3	8	–
Clay	–	–	–	8	23	–	13	18	–	–	1	2	–
Clinton	–	–	–	11	97	–	30	37	–	–	–	1	*
Cooper	–	–	–	9	18	–	58	28	1	–	1	–	–
Dade	–	–	–	19	–	–	148	50	–	–	–	–	–
Daviess	–	–	–	82	380	–	77	56	–	–	8	2	*
De Kalb	–	–	–	11	101	–	85	52	–	–	3	1	*
Gentry	–	–	–	8	73	–	38	15	–	–	–	1	*
Greene	–	–	–	*	–	*	49	131	–	–	–	–	–
Grundy	–	–	–	22	123	–	39	40	–	–	9	1	–
Harrison	–	–	–	9	89	–	119	75	–	–	3	1	*
Henry	–	–	–	10	13	–	105	142	–	–	–	–	–
Holt	–	–	–	–	19	–	87	12	–	–	3	–	–
Jackson	–	–	–	3	5	–	5	3	–	–	1	–	–
Jasper	–	–	–	38	6	–	130	64	–	–	–	–	–
Johnson	–	–	–	*	5	–	2	2	–	–	–	–	–
Knox	–	–	–	19	57	–	239	207	–	–	2	–	–
Lafayette	–	–	–	10	72	*	28	19	1	–	1	1	–
Lawrence	–	–	–	–	–	*	314	180	–	–	–	–	–
Lewis	–	–	–	27	71	–	152	219	–	–	2	3	–
Lincoln	–	–	–	30	9	–	158	294	–	–	–	19	–
Linn	–	–	–	19	142	–	192	85	–	–	–	–	–
Livingston	–	–	–	40	217	–	94	63	–	–	8	2	–
Macon	–	–	–	40	59	–	355	192	–	–	2	–	–
Marion	–	–	–	44	57	–	203	160	–	–	10	–	–
Mercer	–	–	–	8	108	–	47	29	–	–	1	1	–
Monroe	–	–	–	51	71	–	393	219	–	–	2	–	–
Nodaway	–	–	–	*	9	–	15	14	–	–	–	–	*
Pettis	–	–	–	2	12	2	7	23	–	–	–	–	–
Pike	–	–	–	33	48	–	583	404	–	–	2	15	–
Platte	–	–	–	–	1	–	2	8	–	–	1	–	–
Putnam	–	–	–	–	41	–	38	149	–	–	2	–	–
Ralls	–	–	–	48	70	–	249	215	–	–	13	8	–
Randolph	–	–	–	54	259	*	1,058	225	–	–	*	*	–
Ray	–	–	–	8	81	–	13	22	–	–	–	1	–
Saline	–	–	–	23	51	1	85	57	1	–	1	–	–
Schuyler	–	–	–	3	7	–	28	25	–	–	1	–	–
Scotland	–	–	–	8	109	–	114	58	–	–	2	12	–
Shelby	–	–	–	21	31	–	155	140	–	–	2	–	–
Sullivan	–	–	–	1	84	–	85	56	–	–	1	–	–
Vernon	–	–	–	37	15	–	263	119	–	–	–	11	–
Worth	–	–	–	1	17	–	8	54	–	–	3	1	–
Total	–	–	3	1,056	3,998	4	7,757	4,998	2	–	105	96	2
Riverborder Unit													
Boone	–	–	–	30	29	–	308	328	–	–	–	*	–
Callaway	–	–	–	18	48	–	360	255	–	–	1	1	–
Cape Girardeau	14	58	–	17	12	10	818	895	–	–	4	*	–
Cole	–	–	–	4	7	–	56	82	–	–	–	–	–
Dunklin	8	–	–	10	48	–	24	22	–	–	–	–	–
Franklin	–	–	–	10	4	3	253	239	–	–	–	4	–
Gasconade	–	–	–	29	28	1	474	482	–	–	–	8	–
Howard	–	–	–	180	488	–	345	173	1	–	1	*	–
Jefferson	–	12	–	4	*	4	444	443	–	–	–	2	–
Mississippi	–	–	–	–	8	–	–	–	–	–	–	8	–
Moniteau	–	–	–	2	8	–	27	15	–	–	–	–	–
Montgomery	–	–	–	28	89	–	157	188	–	–	–	3	–
New Madrid	–	–	–	1	351	3	78	17	–	–	–	214	–
Osage	–	–	–	38	41	–	728	489	–	–	–	1	–
Pemiscot	–	–	–	2	128	–	–	–	–	–	–	–	–
Perry	2	42	–	18	12	10	673	617	–	–	–	–	–
Scott	*	11	–	*	12	2	91	70	–	–	–	–	–
St Charles	–	–	–	34	518	–	109	118	–	–	–	10	–
St Louis	–	–	–	7	–	–	121	90	–	–	–	1	–
Ste Genevieve	–	7	–	13	11	3	358	334	–	–	–	1	–
Stoddard	11	*	–	30	7	*	133	135	–	–	–	–	–
Warren	–	–	–	29	40	*	153	233	–	–	–	28	–
Total	33	128	–	481	1,883	36	5,705	4,980	1	–	8	277	–
State total	187	233	131	2,715	8,359	128	87,668	34,747	3	3	112	745	2

* Less than 500 cubic feet.

Table 7. -- Industrial roundwood production by Forest Survey Unit, species group, and State of destination, Missouri, 1997

(In thousand cubic feet)

ALL UNITS

Species group	Total	Destination									
		Illinois	Indiana	Iowa	Kansas	Missouri	Nebraska	Wisconsin	Arkansas	Kentucky	Other countries
Softwoods											
Eastern redcedar	3,077	--	--	--	--	3,047	--	--	--	--	30
Shortleaf pine	8,723	--	--	--	--	8,654	--	--	70	--	--
Cypress	1	--	--	--	--	1	--	--	--	--	--
Other softwoods	106	--	--	--	--	--	--	--	--	106	--
Total	11,908	--	--	--	--	11,701	--	--	70	106	30
Hardwoods											
Soft maple	3,914	2	--	204	--	3,290	3	--	--	416	--
Hard maple	141	1	11	3	--	127	--	--	--	--	--
River birch	440	--	--	1	--	46	--	--	--	394	--
Hickory	4,429	14	--	15	--	4,148	--	--	252	--	--
Hackberry	616	*	--	4	--	180	2	--	--	429	--
Persimmon	8	--	--	--	--	8	--	--	--	--	--
Ash	1,615	120	--	16	--	1,170	5	--	100	204	1
Honeylocust	2	--	--	--	--	2	--	--	--	--	--
Black walnut	3,535	109	42	215	243	2,712	11	--	--	--	204
Sweetgum	187	--	--	--	--	113	--	--	74	--	--
Yellow-poplar	233	--	--	--	--	174	--	--	58	--	--
Tupelo	131	--	--	3	--	128	--	--	--	--	--
Sycamore	2,715	2	--	6	--	2,707	--	--	--	--	--
Cottonwood	6,359	*	--	154	--	5,702	29	--	36	437	--
Black cherry	128	2	31	*	--	94	--	--	--	--	--
Red oak group	67,668	112	7	209	--	66,278	16	2	679	162	203
White oak group	34,747	111	15	174	--	33,004	18	5	684	175	582
Willow	3	--	--	--	--	3	--	--	--	--	--
Sassafras	3	--	--	--	--	3	--	--	--	--	--
Basswood	112	--	--	7	--	105	--	--	--	--	--
Elm	745	2	--	16	--	316	--	--	--	409	1
Kentucky coffeetree	2	--	--	--	--	2	--	--	--	--	--
Total	127,735	477	105	1,028	243	120,313	84	7	1,863	2,625	991
All species	139,643	477	105	1,028	243	132,014	84	7	1,932	2,731	1,022

EASTERN OZARK UNIT

Softwoods											
Eastern redcedar	337	--	--	--	--	326	--	--	--	--	11
Shortleaf pine	6,022	--	--	--	--	5,952	--	--	70	--	--
Other softwoods	106	--	--	--	--	--	--	--	--	106	--
Total	6,465	--	--	--	--	6,278	--	--	70	106	11
Hardwoods											
Soft maple	471	*	--	--	--	279	--	--	--	192	--
Hard maple	19	--	7	--	--	12	--	--	--	--	--
River birch	221	--	--	--	--	39	--	--	--	182	--
Hickory	2,212	7	--	--	--	2,120	--	--	85	--	--
Hackberry	207	--	--	--	--	9	--	--	--	198	--
Persimmon	8	--	--	--	--	8	--	--	--	--	--
Ash	504	62	--	--	--	204	--	--	34	204	--
Honeylocust	2	--	--	--	--	2	--	--	--	--	--
Black walnut	317	--	--	--	--	312	--	--	--	--	5
Sweetgum	102	--	--	--	--	79	--	--	23	--	--
Yellow-poplar	61	--	--	--	--	46	--	--	14	--	--
Tupelo	90	--	--	--	--	90	--	--	--	--	--
Sycamore	602	1	--	--	--	601	--	--	--	--	--
Cottonwood	339	--	--	--	--	122	--	--	15	202	--
Black cherry	38	--	21	--	--	17	--	--	--	--	--
Red oak group	34,508	94	--	--	--	33,999	--	--	206	162	47
White oak group	13,617	7	--	--	--	13,238	--	--	197	175	--
Sassafras	3	--	--	--	--	3	--	--	--	--	--
Basswood	*	--	--	--	--	*	--	--	--	--	--
Elm	304	1	--	--	--	114	--	--	--	189	--
Total	53,626	173	28	--	--	51,295	--	--	574	1,504	52
All species	60,091	173	28	--	--	57,573	--	--	644	1,610	63

(Table 7 continued on next page)

(Table 7 continued)

SOUTHWEST OZARK UNIT

Species group	Total	Destination									
		Illinois	Indiana	Iowa	Kansas	Missouri	Nebraska	Wisconsin	Arkansas	Kentucky	Other countries
Softwoods											
Eastern redcedar	1,318	--	--	--	--	1,318	--	--	--	--	--
Shortleaf pine	2,380	--	--	--	--	2,380	--	--	--	--	--
Total	3,699	--	--	--	--	3,699	--	--	--	--	--
Hardwoods											
Soft maple	50	--	--	--	--	50	--	--	--	--	--
River birch	*	--	--	--	--	*	--	--	--	--	--
Hickory	886	--	--	--	--	719	--	--	166	--	--
Hackberry	27	--	--	--	--	27	--	--	--	--	--
Ash	169	--	--	--	--	104	--	--	66	--	--
Black walnut	682	--	3	--	--	659	--	--	--	--	19
Sweetgum	53	--	--	--	--	1	--	--	51	--	--
Yellow-poplar	44	--	--	--	--	--	--	--	44	--	--
Tupelo	38	--	--	--	--	38	--	--	--	--	--
Sycamore	193	--	--	--	--	193	--	--	--	--	--
Cottonwood	35	--	--	--	--	14	--	--	21	--	--
Black cherry	28	--	2	--	--	25	--	--	--	--	--
Red oak group	14,567	--	2	--	--	14,027	--	1	473	--	65
White oak group	8,474	--	--	--	--	8,004	--	--	467	--	3
Basswood	*	--	--	--	--	*	--	--	--	--	--
Elm	15	--	--	--	--	15	--	--	--	--	--
Total	23,261	--	8	--	--	21,878	--	1	1,288	--	87
All species	26,960	--	8	--	--	25,576	--	1	1,288	--	87

NORTHWEST OZARK UNIT

Softwoods											
Eastern redcedar	627	--	--	--	--	825	--	--	--	--	1
Shortleaf pine	209	--	--	--	--	209	--	--	--	--	--
Total	836	--	--	--	--	835	--	--	--	--	1
Hardwoods											
Soft maple	135	--	--	--	--	135	--	--	--	--	--
River birch	1	--	--	--	--	1	--	--	--	--	--
Hickory	324	--	--	--	--	324	--	--	--	--	--
Hackberry	1	--	--	--	--	1	--	--	--	--	--
Ash	152	--	--	--	--	152	--	--	--	--	--
Black walnut	220	--	3	--	--	208	--	--	--	--	8
Sycamore	383	--	--	--	--	383	--	--	--	--	--
Cottonwood	124	--	--	--	--	124	--	--	--	--	--
Black cherry	22	--	--	--	--	22	--	--	--	--	--
Red oak group	5,131	--	--	--	--	5,102	--	--	--	--	29
White oak group	4,679	--	--	--	--	4,663	--	--	--	--	16
Elm	53	--	--	--	--	53	--	--	--	--	--
Total	11,226	--	3	--	--	11,168	--	--	--	--	54
All species	12,062	--	3	--	--	12,003	--	--	--	--	55

(Table 7 continued on next page)

(Table 7 continued)

PRAIRIE UNIT

Species group	Total	Destination									
		Illinois	Indiana	Iowa	Kansas	Missouri	Nebraska	Wisconsin	Arkansas	Kentucky	Other countries
Softwoods											
Eastern redcedar	9	--	--	--	--	9	--	--	--	--	--
Total	9	--	--	--	--	9	--	--	--	--	--
Hardwoods											
Soft maple	2,506	--	--	204	--	2,299	3	--	--	--	--
Hard maple	81	*	2	3	--	78	--	--	--	--	--
River birch	5	--	--	1	--	4	--	--	--	--	--
Hickory	592	--	--	15	--	577	--	--	--	--	--
Hackberry	147	--	--	4	--	140	2	--	--	--	--
Ash	460	*	--	16	--	438	5	--	--	--	1
Black walnut	1,940	1	35	215	243	1,278	11	--	--	--	159
Tupelo	3	--	--	3	--	--	--	--	--	--	--
Sycamore	1,056	--	--	8	--	1,050	--	--	--	--	--
Cottonwood	3,998	--	--	154	--	3,814	29	--	--	--	--
Black cherry	4	*	1	*	--	3	--	--	--	--	--
Red oak group	7,757	1	5	209	--	7,479	16	1	--	--	48
White oak group	4,996	*	10	174	--	4,349	18	3	--	--	442
Willow	2	--	--	--	--	2	--	--	--	--	--
Basswood	105	--	--	7	--	98	--	--	--	--	--
Elm	96	--	--	16	--	78	--	--	--	--	1
Kentucky coffeetree	2	--	--	--	--	2	--	--	--	--	--
Total	23,749	3	53	1,028	243	21,685	84	5	--	--	650
All species	23,758	3	53	1,028	243	21,693	84	5	--	--	650

RIVERBORDER UNIT

Softwoods											
Eastern redcedar	786	--	--	--	--	768	--	--	--	--	18
Shortleaf pine	112	--	--	--	--	112	--	--	--	--	--
Cypress	1	--	--	--	--	1	--	--	--	--	--
Total	899	--	--	--	--	881	--	--	--	--	18
Hardwoods											
Soft maple	752	2	--	--	--	527	--	--	--	223	--
Hard maple	42	1	1	--	--	40	--	--	--	--	--
River birch	213	--	--	--	--	1	--	--	--	212	--
Hickory	415	7	--	--	--	408	--	--	--	--	--
Hackberry	234	*	--	--	--	2	--	--	--	231	--
Ash	330	58	--	--	--	272	--	--	--	--	--
Black walnut	377	108	--	--	--	256	--	--	--	--	12
Sweetgum	33	--	--	--	--	33	--	--	--	--	--
Yellow-poplar	128	--	--	--	--	128	--	--	--	--	--
Sycamore	481	1	--	--	--	480	--	--	--	--	--
Cottonwood	1,863	*	--	--	--	1,628	--	--	--	235	--
Black cherry	36	2	7	--	--	26	--	--	--	--	--
Red oak group	5,705	17	--	--	--	5,673	--	--	--	--	15
White oak group	4,980	103	5	--	--	4,749	--	2	--	--	121
Willow	1	--	--	--	--	1	--	--	--	--	--
Basswood	6	--	--	--	--	8	--	--	--	--	--
Elm	277	1	--	--	--	56	--	--	--	220	--
Total	15,872	301	14	--	--	14,287	--	2	--	1,121	148
All species	16,772	301	14	--	--	15,168	--	2	--	1,121	166

* Less than 500 cubic feet.

Table 8 — Saw-log production by Forest Survey Unit, county, and species group, Missouri, 1997

(In thousand board feet) [1]

Forest Survey Unit and county	All species	Species group										
		Eastern redcedar	Shortleaf pine	Cypress	Soft maple	Hard maple	River birch	Hickory	Hackberry	Persimmon	Ash	Honey-locust
Eastern Ozark Unit												
Bollinger	15,584	–	23	–	309	40	8	801	–	–	217	–
Butler	13,804	–	3,851	–	147	–	180	633	1	–	191	–
Carter	16,350	–	3,352	–	6	–	–	840	–	–	84	–
Crawford	22,390	25	867	–	266	–	–	975	–	–	200	–
Dent	24,215	15	1,493	–	–	–	6	861	6	–	21	–
Iron	24,775	160	1,378	–	203	7	–	1,053	–	–	19	–
Madison	11,926	62	1,261	–	74	7	–	369	–	–	62	–
Oregon	30,587	38	2,167	–	12	–	–	972	11	–	109	–
Reynolds	34,969	70	4,306	–	25	4	–	1,281	–	–	44	–
Ripley	28,060	–	2,211	–	286	–	–	1,660	36	48	309	10
Shannon	38,578	75	5,411	–	–	–	–	1,564	–	–	–	–
St. Francois	3,660	135	140	–	60	7	–	170	–	–	48	–
Washington	20,878	310	2,423	–	80	–	–	397	–	–	2	–
Wayne	27,816	65	2,672	–	229	7	40	1,290	–	–	336	–
Total	313,593	955	31,555	–	1,695	72	234	12,867	54	48	1,642	10
Southwest Ozark Unit												
Barry	6,319	336	–	–	–	–	–	357	–	–	114	–
Christian	7,959	190	217	–	–	–	–	139	–	–	33	–
Douglas	22,916	345	1,811	–	–	–	–	727	–	–	138	–
Howell	26,853	–	1,214	–	142	–	–	1,136	–	–	117	–
McDonald	9,893	–	–	–	–	–	–	439	101	–	101	–
Newton	4,878	–	105	–	–	–	–	70	62	–	89	–
Ozark	5,727	510	514	–	9	–	–	94	–	–	41	–
Stone	3,349	388	600	–	–	–	–	123	–	–	–	–
Taney	3,700	2,456	–	–	–	–	–	5	–	–	5	–
Texas	28,333	7	5,606	–	115	–	2	876	2	–	75	–
Webster	2,900	–	134	–	–	–	–	100	–	–	8	–
Wright	13,973	–	487	–	8	–	–	464	–	–	83	–
Total	136,799	4,232	10,687	–	274	–	2	4,530	166	–	803	–
Northwest Ozark Unit												
Benton	1,467	8	–	–	–	–	–	20	–	–	–	–
Camden	5,404	217	–	–	11	–	–	131	–	–	18	–
Cedar	3,479	–	–	–	363	–	–	125	–	–	239	–
Dallas	939	–	–	–	–	–	–	6	–	–	4	–
Hickory	927	75	–	–	–	–	–	23	–	–	–	–
Laclede	7,207	14	31	–	–	–	–	186	–	–	81	–
Maries	8,063	355	75	–	203	–	–	399	–	–	164	–
Miller	3,982	35	–	–	29	–	–	49	–	–	105	–
Morgan	1,611	28	–	–	1	–	–	53	–	–	1	–
Phelps	8,701	–	287	–	100	–	5	405	5	–	74	–
Polk	610	–	–	–	–	–	–	4	–	–	4	–
Pulaski	10,282	41	351	–	26	–	2	367	2	–	142	–
St Clair	2,862	–	–	–	46	–	–	117	–	–	10	–
Total	55,533	772	744	–	779	–	7	1,885	7	–	842	–

(Table 8 continued on next page)

(Table 8 continued)

Forest Survey Unit and county	All species	Species group: Eastern redcedar	Shortleaf pine	Cypress	Soft maple	Hard maple	River birch	Hickory	Hackberry	Persimmon	Ash	Honey-locust
Prairie Unit												
Adair	1,793	–	–	–	165	12	–	39	1	–	43	–
Andrew	852	–	–	–	150	36	–	13	–	–	1	–
Atchison	1,932	–	–	–	72	–	–	11	–	–	14	–
Audrain	2,761	–	–	–	178	–	–	112	3	–	118	–
Barton	4,982	–	–	–	689	–	–	166	240	–	287	–
Bates	2,227	–	–	–	47	–	–	118	–	–	28	–
Buchanan	772	–	–	–	116	36	–	22	–	–	8	–
Caldwell	2,290	–	–	–	518	–	–	46	9	–	41	–
Carroll	3,056	–	–	–	506	–	–	15	87	–	30	–
Cass	279	–	–	–	39	–	–	5	–	–	8	–
Chariton	9,775	–	–	–	984	–	–	125	–	–	134	–
Clark	3,951	–	–	–	518	–	3	107	7	–	147	–
Clay	507	–	–	–	96	–	–	4	35	–	9	–
Clinton	1,356	–	–	–	122	–	–	40	22	–	18	–
Cooper	1,039	–	–	–	206	–	–	3	–	–	13	–
Dade	1,852	–	–	–	–	–	–	38	–	–	18	–
Daviess	3,656	–	–	–	597	–	–	98	72	–	71	–
De Kalb	2,171	–	–	–	284	–	–	52	21	–	24	–
Gentry	1,065	–	–	–	148	–	–	2	13	–	29	–
Greene	1,479	–	–	–	–	–	–	1	–	–	1	–
Grundy	2,209	–	–	–	526	–	–	61	74	–	48	–
Harrison	2,534	–	–	–	361	–	–	22	22	–	50	–
Henry	1,842	–	–	–	83	–	–	166	–	–	65	–
Holt	962	–	–	–	72	–	–	11	14	–	14	–
Jackson	109	–	–	–	11	–	–	3	–	–	–	–
Jasper	1,642	–	–	–	–	–	–	–	50	–	75	–
Johnson	94	–	–	–	39	–	–	–	–	–	8	–
Knox	2,577	–	–	–	199	11	–	46	–	–	25	–
Lafayette	1,211	–	–	–	315	–	–	5	26	–	31	–
Lawrence	3,238	–	–	–	–	–	–	28	–	–	15	–
Lewis	2,787	–	–	–	613	12	–	17	–	–	46	–
Lincoln	3,470	–	–	–	429	59	–	193	3	–	337	–
Linn	3,429	–	–	–	683	–	–	15	–	–	48	–
Livingston	3,827	–	–	–	891	–	–	70	81	–	80	–
Macon	3,998	–	–	–	316	10	–	54	–	–	63	–
Marion	2,655	–	–	–	168	32	–	90	–	–	16	–
Mercer	1,568	–	–	–	255	–	–	33	16	–	38	–
Monroe	4,634	21	–	–	255	34	–	131	–	–	99	–
Nodaway	375	–	–	–	117	–	–	2	–	–	1	–
Pettis	178	–	–	–	28	–	–	11	–	–	8	–
Pike	6,405	–	–	–	511	135	–	131	3	–	167	–
Platte	69	–	–	–	55	–	–	–	–	–	–	–
Putnam	1,673	–	–	–	72	–	–	232	3	–	10	–
Ralls	3,926	–	–	–	256	69	–	153	3	–	99	–
Randolph	10,066	–	–	–	577	4	–	145	*	–	130	–
Ray	1,156	–	–	–	317	–	–	11	26	–	17	–
Saline	1,812	–	–	–	509	–	–	5	–	–	19	–
Schuyler	548	–	–	–	147	–	–	3	3	–	10	–
Scotland	2,293	–	–	–	297	–	1	107	6	–	29	–
Shelby	1,967	–	–	–	235	11	–	55	–	–	42	–
Sullivan	1,635	–	–	–	238	–	–	110	3	–	31	–
Vernon	3,160	–	–	–	129	–	–	242	40	–	83	–
Worth	789	–	–	–	108	–	–	17	9	–	10	–
Total	126,631	21	–	–	14,245	462	4	3,185	891	–	2,753	–
Riverborder Unit												
Boone	3,558	50	–	–	198	–	–	120	*	–	71	–
Callaway	4,051	200	–	–	260	6	–	60	*	–	64	–
Cape Girardeau	8,713	–	–	–	121	112	–	157	4	–	298	–
Cole	665	72	–	–	4	–	–	11	–	–	32	–
Dunklin	799	–	–	8	67	–	–	15	–	–	15	–
Franklin	2,520	38	4	–	32	–	–	135	–	–	46	–
Gasconade	6,266	162	375	–	280	–	–	97	–	–	27	–
Howard	7,661	–	–	–	838	–	–	98	*	–	143	–
Jefferson	5,207	129	182	–	19	15	–	51	–	–	70	–
Moniteau	353	83	–	–	1	–	–	10	–	–	4	–
Montgomery	2,415	104	–	–	139	28	–	–	3	–	68	–
New Madrid	1,753	–	–	–	18	–	–	–	–	–	23	–
Osage	7,679	175	6	–	101	*	–	18	–	–	269	–
Perniscot	937	–	–	–	19	–	–	–	–	–	–	–
Perry	8,010	47	20	–	93	60	–	162	8	–	298	–
Scott	1,132	–	–	–	2	10	–	3	*	–	76	–
St. Charles	5,489	2	–	–	207	2	–	151	–	–	167	–
St. Louis	1,188	*	–	–	42	–	–	52	–	–	20	–
Ste. Genevieve	4,018	81	60	–	75	11	–	138	–	–	106	–
Stoddard	1,965	–	–	–	82	*	–	137	–	–	75	–
Warren	3,065	4	–	–	309	–	–	143	–	–	124	–
Total	77,444	1,146	647	8	2,908	245	–	1,558	17	–	1,997	–
State total	710,000	7,125	43,633	8	19,902	778	247	24,024	1,134	48	8,037	10

(Table 8 continued on next page)

(Table 8 continued)

Forest Survey Unit and county	Species group												
	Black walnut	Sweetgum	Yellow-poplar	Tupelo	Sycamore	Cotton-wood	Black cherry	Kentucky coffeetree	Red oak group	White oak group	Sassafras	Basswood	Elm
Eastern Ozark Unit													
Bollinger	58	278	112	–	350	89	30	–	7,995	5,249	–	2	23
Butler	99	78	–	5	391	170	1	–	5,912	2,104	–	–	42
Carter	92	1	–	33	72	8	1	–	9,442	2,368	–	–	51
Crawford	46	–	–	–	455	211	1	–	13,372	5,714	–	–	258
Dent	92	–	–	–	339	21	7	–	15,662	5,692	–	–	–
Iron	52	–	42	–	340	80	7	–	17,162	4,232	–	–	41
Madison	98	7	55	–	231	51	8	–	6,422	3,130	–	–	88
Oregon	257	1	–	229	394	30	23	–	20,277	6,052	10	–	5
Reynolds	97	1	33	–	265	30	6	–	24,732	4,058	–	–	19
Ripley	140	158	88	33	267	142	1	–	15,565	7,028	10	–	66
Shannon	229	–	–	149	49	50	3	–	22,866	8,165	–	–	17
St. Francois	21	–	6	–	91	41	7	–	2,152	783	–	–	–
Washington	47	–	–	–	70	24	1	–	11,938	5,543	–	–	43
Wayne	98	95	32	95	344	25	8	–	15,995	6,438	–	–	46
Total	1,427	619	368	544	3,657	972	106	–	189,493	66,554	20	2	699
Southwest Ozark Unit													
Barry	540	184	138	–	–	84	1	–	3,065	1,499	–	–	–
Christian	298	–	–	–	31	–	3	–	5,536	1,513	–	–	–
Douglas	147	–	–	3	205	–	3	–	13,125	6,381	–	–	30
Howell	156	–	–	8	210	81	69	–	18,194	5,525	–	–	–
McDonald	417	127	127	–	179	64	–	–	5,807	2,530	–	–	–
Newton	555	–	–	–	233	–	–	–	2,575	1,189	–	–	–
Ozark	147	–	–	–	25	–	3	–	3,247	1,136	–	–	–
Stone	170	–	–	100	23	–	1	–	1,561	384	–	–	–
Taney	139	–	–	–	–	–	3	–	455	636	–	–	–
Texas	163	–	–	120	111	15	35	–	14,228	6,917	–	–	61
Webster	139	–	–	–	10	–	3	–	1,726	780	–	–	–
Wright	139	8	–	–	17	–	33	–	9,341	3,390	–	3	–
Total	3,012	319	265	232	1,043	244	154	–	78,862	31,881	–	3	91
Northwest Ozark Unit													
Benton	47	–	–	–	6	–	1	–	625	760	–	–	–
Camden	89	–	–	–	79	–	13	–	2,579	2,256	–	–	11
Cedar	6	–	–	–	289	21	–	–	1,700	724	–	–	14
Dallas	47	–	–	–	10	–	1	–	402	468	–	–	–
Hickory	47	–	–	–	–	–	1	–	302	478	–	–	–
Laclede	95	–	–	–	282	–	32	–	4,045	2,418	–	–	24
Maries	98	–	–	–	580	–	10	–	3,296	2,770	–	–	115
Miller	160	–	–	–	220	770	26	–	1,443	1,145	–	–	–
Morgan	8	–	–	–	1	13	6	–	980	520	–	–	–
Phelps	92	–	–	–	333	–	6	–	4,638	2,705	–	–	50
Polk	155	–	–	–	8	–	1	–	160	277	–	–	–
Pulaski	92	–	–	–	412	–	34	–	6,366	2,421	–	–	26
St Clair	14	–	–	–	1	–	–	–	725	1,949	–	–	–
Total	950	–	–	–	2,221	804	132	–	27,260	18,890	–	–	239

(Table 8 continued on next page)

(Table 8 continued)

Forest Survey Unit and county	Species group												
	Black walnut	Sweetgum	Yellow-poplar	Tupelo	Sycamore	Cotton-wood	Black cherry	Kentucky coffeetree	Red oak group	White oak group	Sassafras	Basswood	Elm
Prairie Unit													
Adair	75	–	–	–	51	198	–	–	689	503	–	16	–
Andrew	290	–	–	–	2	197	–	1	98	46	–	17	–
Atchison	173	–	–	–	100	1,015	–	–	486	45	–	17	–
Audrain	183	–	–	–	138	283	–	–	1,162	567	–	13	4
Barton	252	–	–	–	684	226	–	–	1,578	859	–	–	–
Bates	154	–	–	–	310	80	–	–	996	483	–	–	12
Buchanan	403	–	–	–	2	76	–	1	36	39	–	33	–
Caldwell	7	–	–	–	57	777	–	1	618	213	–	–	5
Carroll	81	–	–	–	203	1,517	–	–	372	218	–	–	27
Cass	109	–	–	–	–	28	–	–	50	40	–	–	–
Chanton	303	–	–	–	131	3,798	–	–	3,812	488	–	–	–
Clark	160	–	–	–	134	1,234	1	–	773	847	–	17	3
Clay	7	–	–	–	47	158	–	–	68	69	–	–	13
Clinton	49	–	–	–	64	683	–	1	163	183	–	–	9
Cooper	279	–	–	–	47	86	–	–	319	85	–	–	–
Dade	565	–	–	–	117	–	–	–	833	281	–	–	–
Daviess	52	–	–	–	200	1,783	–	1	426	297	–	50	10
De Kalb	262	–	–	–	65	713	–	1	471	251	–	17	9
Gentry	52	–	–	–	49	513	–	1	204	48	–	–	4
Greene	912	–	–	–	2	–	1	–	273	290	–	–	–
Grundy	15	–	–	–	134	872	–	–	213	202	–	55	8
Harrison	294	–	–	–	56	626	–	1	663	413	–	17	9
Henry	–	–	–	–	55	83	–	–	592	799	–	–	–
Holt	173	–	–	–	–	131	–	–	486	45	–	17	–
Jackson	1	–	–	–	21	31	–	–	26	16	–	–	–
Jasper	166	–	–	–	221	40	–	–	731	359	–	–	–
Johnson	1	–	–	–	–	28	–	–	9	9	–	–	–
Knox	44	–	–	–	117	403	–	–	1,336	385	–	12	–
Lafayette	1	–	–	–	58	500	*	–	159	109	–	–	8
Lawrence	728	–	–	–	–	–	1	–	1,762	704	–	–	–
Lewis	155	–	–	–	123	329	–	–	838	641	–	12	–
Lincoln	130	–	–	–	180	60	–	–	865	1,101	–	–	113
Linn	75	–	–	–	116	1,006	–	–	1,075	412	–	–	–
Livingston	88	–	–	–	244	1,533	–	–	515	261	–	50	14
Macon	119	–	–	–	245	415	–	–	1,989	775	–	12	–
Marion	138	–	–	–	269	404	–	–	1,135	344	–	58	–
Mercer	18	–	–	–	48	760	–	–	256	134	–	6	4
Monroe	117	–	–	–	308	502	–	–	2,202	950	–	14	–
Nodaway	70	–	–	–	1	62	–	*	81	39	–	–	–
Pettis	–	–	–	–	–	38	–	–	37	56	–	–	–
Pike	214	–	–	–	191	259	–	–	3,305	1,431	–	14	43
Platte	7	–	–	–	–	–	–	–	3	3	–	–	–
Putnam	11	–	–	–	–	290	–	–	205	837	–	15	–
Ralls	159	–	–	–	290	497	–	–	1,394	894	–	77	35
Randolph	295	–	–	–	287	1,711	*	–	5,924	989	–	3	1
Ray	–	–	–	–	51	570	–	–	62	94	–	–	8
Saline	195	–	–	–	130	317	*	–	473	164	–	–	–
Schuyler	23	–	–	–	15	52	–	–	147	142	–	7	–
Scotland	55	–	–	–	48	769	–	–	635	262	–	14	70
Shelby	119	–	–	–	126	220	–	–	862	286	–	12	–
Sullivan	10	–	–	–	5	592	–	–	364	279	–	4	–
Vernon	118	–	–	–	226	108	–	–	1,478	670	–	–	68
Worth	173	–	–	–	9	117	–	–	43	281	–	17	5
Total	8,081	–	–	–	5,975	26,691	5	10	43,295	19,939	–	591	483
Riverborder Unit													
Boone	88	–	–	–	175	195	–	–	1,725	935	–	–	1
Callaway	44	–	–	–	78	292	–	–	2,002	1,036	–	3	5
Cape Girardeau	70	88	343	–	101	87	47	–	4,584	2,674	–	27	*
Cole	6	–	–	–	18	41	–	–	313	169	–	–	–
Dunklin	–	34	–	–	58	343	–	–	134	126	–	–	–
Franklin	6	–	–	–	58	26	17	–	1,419	716	–	–	24
Gasconade	83	–	–	–	164	179	6	–	2,661	2,196	–	–	38
Howard	75	–	–	–	832	3,022	–	–	1,930	724	–	–	*
Jefferson	17	–	73	–	22	3	17	–	2,497	2,102	–	–	11
Moniteau	2	–	–	–	4	9	–	–	154	87	–	–	–
Montgomery	64	–	–	–	109	328	–	–	881	673	–	–	18
New Madrid	308	–	–	–	9	864	15	–	425	91	–	–	–
Osage	64	–	–	–	233	291	–	–	4,092	2,423	–	–	8
Pemiscot	–	–	–	–	10	908	–	–	–	–	–	–	–
Perry	418	10	256	–	94	85	50	–	3,780	2,627	–	–	–
Scott	10	*	66	–	2	87	10	–	511	355	–	–	–
St. Charles	55	–	–	–	205	3,666	–	–	610	361	–	–	63
St. Louis	25	–	–	–	42	–	–	–	677	322	–	–	8
Ste. Genevieve	79	–	40	–	79	75	11	–	2,012	1,246	–	–	4
Stoddard	*	67	1	–	184	50	1	–	749	618	–	–	–
Warren	88	–	–	–	179	261	*	–	840	927	–	–	170
Total	1,502	200	779	–	2,655	10,830	173	–	31,994	20,407	–	30	349
State total	14,972	1,138	1,412	776	15,552	39,541	570	10	370,903	157,672	20	627	1,861

* Less than 500 board feet.

[1] International 1/4-inch rule

Table 9 -- Saw-log production by Forest Survey Unit, species group, and State of destination, Missouri, 1997

(In thousand board feet) [1]

ALL UNITS

Species group	Total	Destination							
		Illinois	Indiana	Iowa	Kansas	Missouri	Nebraska	Arkansas	Other countries
Softwoods									
Eastern redcedar	7,125	--	--	--	--	7,035	--	--	90
Shortleaf pine	43,633	--	--	--	--	43,231	--	402	--
Cypress	8	--	--	--	--	8	--	--	--
Total	50,765	--	--	--	--	50,273	--	402	90
Hardwoods									
Soft maple	19,902	14	--	936	--	18,935	17	--	--
Hard maple	778	6	--	--	--	772	--	--	--
River birch	247	--	--	4	--	243	--	--	--
Hickory	24,024	84	--	75	--	23,283	--	583	--
Hackberry	1,134	3	--	26	--	1,092	14	--	--
Persimmon	48	--	--	--	--	48	--	--	--
Ash	8,037	729	--	97	--	6,941	28	237	6
Honeylocust	10	--	--	--	--	10	--	--	--
Black walnut	14,972	319	--	981	1,110	12,389	50	--	123
Sweetgum	1,138	--	--	--	--	688	--	450	--
Yellow-poplar	1,412	--	--	--	--	1,059	--	353	--
Tupelo	776	--	--	--	--	776	--	--	--
Sycamore	15,552	14	--	15	--	15,523	--	--	--
Cottonwood	39,541	3	--	827	--	38,248	207	256	--
Black cherry	570	13	--	1	--	555	--	--	--
Red oak group	370,903	631	--	1,135	--	366,530	91	1,644	873
White oak group	157,672	110	--	906	--	154,463	99	1,384	709
Sassafras	20	--	--	--	--	20	--	--	--
Basswood	627	--	--	43	--	584	--	--	--
Elm	1,861	14	--	4	--	1,837	--	--	6
Kentucky coffeetree	10	--	--	--	--	10	--	--	--
Total	659,235	1,938	--	5,050	1,110	644,007	505	4,907	1,716
All species	710,000	1,938	--	5,050	1,110	694,281	505	5,309	1,806

EASTERN OZARK UNIT

Softwoods									
Eastern redcedar	955	--	--	--	--	915	--	--	41
Shortleaf pine	31,555	--	--	--	--	31,153	--	402	--
Total	32,510	--	--	--	--	32,067	--	402	41
Hardwoods									
Soft maple	1,695	3	--	--	--	1,693	--	--	--
Hard maple	72	--	--	--	--	72	--	--	--
River birch	234	--	--	--	--	234	--	--	--
Hickory	12,867	41	--	--	--	12,686	--	139	--
Hackberry	54	--	--	--	--	54	--	--	--
Persimmon	48	--	--	--	--	48	--	--	--
Ash	1,642	377	--	--	--	1,206	--	59	--
Honeylocust	10	--	--	--	--	10	--	--	--
Black walnut	1,427	--	--	--	--	1,427	--	--	--
Sweetgum	619	--	--	--	--	480	--	139	--
Yellow-poplar	368	--	--	--	--	280	--	88	--
Tupelo	544	--	--	--	--	544	--	--	--
Sycamore	3,657	7	--	--	--	3,650	--	--	--
Cottonwood	972	--	--	--	--	864	--	108	--
Black cherry	106	--	--	--	--	106	--	--	--
Red oak group	189,493	529	--	--	--	188,412	--	287	265
White oak group	66,554	41	--	--	--	66,344	--	169	--
Sassafras	20	--	--	--	--	20	--	--	--
Basswood	2	--	--	--	--	2	--	--	--
Elm	699	6	--	--	--	693	--	--	--
Total	281,083	1,005	--	--	--	278,825	--	989	265
All species	313,593	1,005	--	--	--	310,892	--	1,391	305

(Table 9 continued on next page)

(Table 9 continued)

SOUTHWEST OZARK UNIT

Species group	Total	Destination							
		Illinois	Indiana	Iowa	Kansas	Missouri	Nebraska	Arkansas	Other countries
Softwoods									
Eastern redcedar	4,232	--	--	--	--	4,232	--	--	--
Shortleaf pine	10,687	--	--	--	--	10,687	--	--	--
Total	14,919	--	--	--	--	14,919	--	--	--
Hardwoods									
Soft maple	274	--	--	--	--	274	--	--	--
River birch	2	--	--	--	--	2	--	--	--
Hickory	4,530	--	--	--	--	4,086	--	444	--
Hackberry	166	--	--	--	--	166	--	--	--
Ash	803	--	--	--	--	625	--	178	--
Black walnut	3,012	--	--	--	--	3,012	--	--	--
Sweetgum	319	--	--	--	--	8	--	311	--
Yellow-poplar	265	--	--	--	--	--	--	265	--
Tupelo	232	--	--	--	--	232	--	--	--
Sycamore	1,043	--	--	--	--	1,043	--	--	--
Cottonwood	244	--	--	--	--	96	--	148	--
Black cherry	154	--	--	--	--	154	--	--	--
Red oak group	78,862	--	--	--	--	77,140	--	1,357	364
White oak group	31,881	--	--	--	--	30,666	--	1,215	--
Basswood	3	--	--	--	--	3	--	--	--
Elm	91	--	--	--	--	91	--	--	--
Total	121,880	--	--	--	--	117,598	--	3,918	364
All species	136,799	--	--	--	--	132,517	--	3,918	364

NORTHWEST OZARK UNIT

Softwoods									
Eastern redcedar	772	--	--	--	--	772	--	--	--
Shortleaf pine	744	--	--	--	--	744	--	--	--
Total	1,516	--	--	--	--	1,516	--	--	--
Hardwoods									
Soft maple	779	--	--	--	--	779	--	--	--
River birch	7	--	--	--	--	7	--	--	--
Hickory	1,885	--	--	--	--	1,885	--	--	--
Hackberry	7	--	--	--	--	7	--	--	--
Ash	842	--	--	--	--	842	--	--	--
Black walnut	950	--	--	--	--	950	--	--	--
Sycamore	2,221	--	--	--	--	2,221	--	--	--
Cottonwood	804	--	--	--	--	804	--	--	--
Black cherry	132	--	--	--	--	132	--	--	--
Red oak group	27,260	--	--	--	--	27,095	--	--	166
White oak group	18,890	--	--	--	--	18,890	--	--	--
Elm	239	--	--	--	--	239	--	--	--
Total	54,017	--	--	--	--	53,851	--	--	166
All species	55,533	--	--	--	--	55,367	--	--	166

(Table 9 continued on next page)

(Table 9 continued)

PRAIRIE UNIT

Species group	Total	Destination							
		Illinois	Indiana	Iowa	Kansas	Missoun	Nebraska	Arkansas	Other countnes
Softwoods									
Eastern redcedar	21	--	--	--	--	21	--	--	--
Total	21	--	--	--	--	21	--	--	--
Hardwoods									
Soft maple	14,245	--	--	936	--	13,293	17	--	--
Hard maple	462	1	--	--	--	460	--	--	--
River birch	4	--	--	4	--	--	--	--	--
Hickory	3,185	--	--	75	--	3,111	--	--	--
Hackberry	891	--	--	26	--	851	14	--	--
Ash	2,753	1	--	97	--	2,621	28	--	6
Black walnut	8,081	6	--	981	1,110	5,829	50	--	104
Sycamore	5,975	--	--	15	--	5,960	--	--	--
Cottonwood	26,691	--	--	827	--	25,656	207	--	--
Black cherry	5	*	--	1	--	3	--	--	--
Red oak group	43,295	6	--	1,135	--	42,012	91	--	50
White oak group	19,939	2	--	906	--	18,362	99	--	570
Basswood	591	--	--	43	--	549	--	--	--
Elm	483	--	--	4	--	473	--	--	6
Kentucky coffeetree	10	--	--	--	--	10	--	--	--
Total	126,610	17	--	5,050	1,110	119,191	505	--	736
All species	126,631	17	--	5,050	1,110	119,212	505	--	736

RIVERBORDER UNIT

Softwoods									
Eastern redcedar	1,146	--	--	--	--	1,096	--	--	50
Shortleaf pine	647	--	--	--	--	647	--	--	--
Cypress	8	--	--	--	--	8	--	--	--
Total	1,800	--	--	--	--	1,751	--	--	50
Hardwoods									
Soft maple	2,908	11	--	--	--	2,897	--	--	--
Hard maple	245	5	--	--	--	240	--	--	--
Hickory	1,558	43	--	--	--	1,515	--	--	--
Hackberry	17	3	--	--	--	14	--	--	--
Ash	1,997	350	--	--	--	1,647	--	--	--
Black walnut	1,502	313	--	--	--	1,170	--	--	18
Sweetgum	200	--	--	--	--	200	--	--	--
Yellow-poplar	779	--	--	--	--	779	--	--	--
Sycamore	2,655	7	--	--	--	2,649	--	--	--
Cottonwood	10,830	3	--	--	--	10,828	--	--	--
Black cherry	173	13	--	--	--	160	--	--	--
Red oak group	31,994	96	--	--	--	31,871	--	--	27
White oak group	20,407	66	--	--	--	20,201	--	--	140
Basswood	30	--	--	--	--	30	--	--	--
Elm	349	8	--	--	--	341	--	--	--
Total	75,644	917	--	--	--	74,542	--	--	185
All species	77,444	917	--	--	--	76,293	--	--	235

* Less than 500 board feet.

[1] International 1/4-inch rule.

Table 10. -- Cooperage production by Forest Survey Unit, Missouri, 1994 and 1997

(In thousand board feet) [1]

Forest Survey Unit	1994	1997	Change	Percent change
Eastern Ozark	9,456	7,912	-1,544	-16.3
Southwest Ozark	2,784	2,497	-287	-10.3
Northwest Ozark	2,502	6,930	4,428	177.0
Prairie	3,924	6,401	2,477	63.1
Riverborder	6,976	6,999	23	0.3
State total	25,641	30,740	5,099	19.9

[1] International 1/4-inch rule.

Table 11. -- Veneer-log production by species group and Forest Survey Unit, Missouri, 1997

(In thousand board feet) [1]

Species group	All Units	Forest Survey Unit				
		Eastern Ozark	Southwest Ozark	Northwest Ozark	Prairie	Riverborder
Eastern redcedar	26	--	--	5	--	20
Hard maple	46	31	--	--	10	6
Ash	2		--	--	2	--
Black walnut	1,189	22	103	55	789	221
Black cherry	137	91	11	--	3	32
Red oak group	247	--	11	--	191	44
White oak group	2,589	--	14	71	1,656	848
Elm	2	--	--	--	2	--
All species	4,237	144	139	130	2,652	1,172

[1] International 1/4-inch rule.

Table 12. -- Pulpwood production by species group and Forest Survey Unit, Missouri, 1997 [1]

(In standard cords)

Species group	All Units	Forest Survey Unit			
		Eastern Ozark	Southwest Ozark	Prairie	Riverborder
Shortleaf pine	1,342	1,342	--	--	--
Soft maple	7,592	2,431	--	1,796	3,365
Hard maple	33	--	--	33	--
River birch	4,985	2,304	--	--	2,681
Hickory	2,011	788	1,182	41	--
Hackberry	5,434	2,512	--	--	2,922
Ash	3,346	2,885	461	--	--
Blackgum	41	--	--	41	--
Sycamore	1,181	--	--	823	358
Cottonwood	8,987	2,556	--	2,520	3,912
Red oak group	7,026	4,006	2,933	86	--
White oak group	7,667	4,331	3,171	165	--
Elm	5,375	2,392	--	200	2,783
All species	55,020	25,547	7,747	5,705	16,021

[1] Includes chips from roundwood.

Table 13. -- Charcoal production by species group and Forest Survey Unit, Missouri, 1997

(In standard cords)

Species group	All Units	Forest Survey Unit			
		Eastern Ozark	Southwest Ozark	Northwest Ozark	Prairie
Shortleaf pine	473	236	237	--	--
Hickory	687	5	642	--	40
Black cherry	35	--	--	--	35
Red oak group	12,477	6,073	4,021	2,378	5
White oak group	3,741	1,446	1,621	669	5
All species	17,413	7,760	6,521	3,047	85

Table 14. -- Handle bolt production by species group and Forest Survey Unit, Missouri, 1997

(In thousand board feet) [1]

Species group	All Units	Forest Survey Unit			
		Eastern Ozark	Southwest Ozark	Prairie	Riverborder
Hickory	1,555	179	10	383	983
Ash	84	34	5	38	7
White oak group	49	--	49	--	--
Total	1,688	213	64	422	990

[1] International 1/4-inch rule.

Table 15. -- Post production by species group and Forest Survey Unit, Missouri, 1997

(In thousand pieces)

Species group	All Units	Forest Survey Unit		
		Eastern Ozark	Southwest Ozark	Northwest Ozark
Softwoods				
Eastern redcedar	160	72	88	--
Shortleaf pine	1,321	680	537	104
Total	1,481	752	625	104
Hardwoods				
Hickory	23	--	--	23
Ash	23	--	--	23
Sycamore	23	--	--	23
Red oak group	266	47	24	195
White oak group	245	28	23	194
Elm	23	--	--	23
Total	604	75	47	483
All species	2,086	827	672	587

Table 16. -- Wood material harvested for industrial roundwood by species group and source of material, Missouri, 1997 [1]

(In thousand cubic feet)

ALL UNITS

	Source of material													
	Growing stock				Non-growing stock									
	Used for products		Logging	Total	Used for products					Logging	Total non-	Total wood	Total wood	Total wood
Species group	Sawtimber	Pole-timber	residue (not used)	growing stock	Limbwood	Saplings	Cull trees	Dead trees	Nonforest trees	slash (not used)	growing stock	material used	material not used	material harvested
Softwoods														
Eastern redcedar	1,450.7	1,150.0	298.7	2,899.4	100.5	39.4	325.4	10.8	--	1,378.7	1,854.8	3,076.9	1,677.4	4,754.3
Shortleaf pine	7,609.4	565.6	955.4	9,130.4	141.4	267.1	83.5	54.3	2.1	4,373.6	4,921.9	8,723.4	5,328.9	14,052.3
Cypress	1.3	*	0.2	1.4	*	--	*	--	--	0.7	0.8	1.3	0.9	2.2
Other softwoods	27.5	76.5	1.2	105.2	--	--	2.0	--	--	9.8	11.8	106.0	11.0	117.0
Total	9,089.0	1,792.1	1,255.4	12,136.5	241.9	306.5	410.9	65.1	2.1	5,762.8	6,789.3	11,907.6	7,018.2	18,925.8
Hardwoods														
Soft maple	2,807.0	194.5	1,044.1	4,045.6	128.2	7.9	291.7	5.2	479.6	2,855.3	3,768.1	3,914.3	3,899.4	7,813.6
Hard maple	108.3	3.9	40.9	153.1	1.6	0.1	8.7	*	18.8	110.9	140.1	141.4	151.8	293.2
River birch	280.4	16.7	28.2	325.2	68.2	--	66.6	2.5	6.0	62.7	205.9	440.2	90.9	531.2
Hickory	3,285.0	140.3	1,430.0	4,855.3	71.1	0.9	347.3	1.3	583.6	3,426.4	4,430.5	4,429.5	4,856.3	9,285.8
Hackberry	408.0	20.0	74.7	502.8	75.8	--	82.1	2.7	27.3	190.2	378.2	616.1	264.9	881.0
Persimmon	6.0	0.1	2.5	8.6	0.1	--	0.5	--	1.2	6.8	8.6	7.9	9.3	17.2
Ash	1,184.7	38.4	434.0	1,657.1	59.3	0.5	135.4	1.8	195.3	1,155.8	1,548.1	1,615.4	1,589.9	3,205.2
Honeylocust	1.3	*	0.5	1.8	*	--	0.1	--	0.2	1.4	1.8	1.6	1.9	3.6
Black walnut	1,473.4	--	219.7	1,693.1	--	--	1,509.3	--	552.6	754.9	2,816.9	3,535.3	974.7	4,510.0
Sweetgum	142.2	3.2	58.6	204.0	1.9	--	12.6	--	27.4	160.8	202.8	187.4	219.4	406.8
Yellow-poplar	176.5	4.0	72.7	253.2	2.4	--	15.7	--	34.0	199.5	251.6	232.5	272.2	504.8
Tupelo	97.5	4.3	40.0	141.7	1.7	0.1	8.7	*	18.7	109.9	139.1	131.1	149.8	280.9
Sycamore	2,007.5	110.9	805.2	2,923.6	38.2	4.6	176.3	1.4	376.4	2,207.5	2,804.4	2,715.2	3,012.7	5,727.9
Cottonwood	5,450.2	199.1	923.4	6,572.7	528.2	11.8	162.9	6.6	--	3,056.9	3,766.4	6,358.8	3,980.3	10,339.2
Black cherry	102.8	2.1	31.8	136.7	1.1	*	7.7	*	13.9	82.8	105.5	127.5	114.6	242.2
Red oak group	54,763.2	1,722.1	13,823.6	70,308.9	1,073.1	10.2	8,720.9	1,305.8	73.0	34,531.5	45,714.4	67,668.3	48,355.1	116,023.4
White oak group	28,685.3	749.8	7,173.9	36,609.0	533.2	7.3	4,180.8	558.0	33.1	15,025.7	20,338.1	34,747.5	22,199.6	56,947.1
Willow	2.6	0.3	0.3	3.1	--	--	--	--	--	0.2	0.2	2.8	0.4	3.3
Sassafras	2.5	0.1	1.0	3.6	*	--	0.2	--	0.5	2.8	3.6	3.3	3.9	7.2
Basswood	86.4	2.6	33.1	122.0	1.1	--	7.0	--	15.1	89.1	112.3	112.1	122.2	234.3
Elm	495.5	34.2	111.4	641.2	75.6	1.2	89.1	2.9	46.4	293.4	508.7	745.1	404.8	1,149.9
Other hardwoods	1.2	*	0.5	1.8	*	--	0.1	--	0.2	1.4	1.8	1.6	1.9	3.6
Total	101,567.4	3,246.5	26,350.1	131,164.0	2,661.0	44.6	15,823.8	1,888.4	2,503.4	64,326.0	87,247.1	127,735.1	90,676.1	218,411.2
All species	110,656.4	5,038.6	27,605.5	143,300.5	2,902.9	351.1	16,234.7	1,953.5	2,505.5	70,088.8	94,036.5	139,642.6	97,694.3	237,337.0

* Less than 50 cubic feet.

[1] Based on factors obtained from the Missouri Logging Utilization Study, 1987, and other regional utilization studies.

Table 17. – Growing-stock removals from timberland for industrial roundwood by Forest Survey Unit, county, and species group, Missouri, 1997

(in thousand cubic feet)

Forest Survey Unit and county	All species	Species group												
		Eastern redcedar	Shortleaf pine	Cypress	Other softwoods	Soft maple	Hard maple	River birch	Hickory	Hackberry	Persimmon	Ash	Honey-locust	Black walnut
Eastern Ozark Unit														
Bollinger	3,077	–	4	–	–	87	9	12	172	12	–	58	–	8
Butler	2,703	–	828	–	–	26	–	32	114	*	–	34	–	11
Carter	3,267	–	665	–	–	1	–	–	151	–	–	15	–	10
Crawford	4,700	8	187	–	–	48	1	–	175	–	–	38	–	5
Dent	4,850	33	357	–	–	–	–	1	154	1	–	4	–	10
Iron	4,898	38	263	–	–	38	2	–	193	–	–	4	–	6
Madison	2,646	15	241	–	52	53	1	38	71	41	–	54	–	10
Oregon	5,907	9	428	–	–	2	–	–	196	2	–	28	–	27
Reynolds	6,654	17	837	–	–	4	1	–	234	–	–	8	–	10
Ripley	5,429	–	422	–	–	51	2	–	319	8	9	64	2	15
Shannon	7,537	28	1,137	–	–	–	–	–	285	–	–	1	–	24
St. Francois	779	32	27	–	–	11	1	–	30	–	–	9	–	2
Washington	3,993	99	475	–	–	14	1	–	71	–	–	*	–	5
Wayne	5,980	18	512	–	53	123	3	85	232	85	–	148	–	10
Total	82,223	291	8,362	–	105	438	21	189	2,399	148	9	482	2	151
Southwest Ozark Unit														
Barry	1,392	160	88	–	–	5	–	–	89	–	–	21	–	58
Christian	1,507	45	41	–	–	–	–	–	25	–	–	6	–	34
Douglas	4,355	99	358	–	–	–	–	–	130	–	–	25	–	16
Howell	5,228	–	247	–	–	25	–	–	225	–	–	29	–	17
McDonald	1,872	11	14	–	–	–	–	–	88	18	–	19	–	44
Newton	930	–	20	–	–	–	–	–	15	11	–	18	–	59
Ozark	1,294	122	98	–	–	2	–	–	39	–	–	18	–	18
Stone	687	93	114	–	–	–	–	–	22	–	–	–	–	21
Taney	1,001	806	–	–	–	–	–	–	23	–	–	9	–	15
Texas	5,759	31	1,305	–	–	21	–	*	157	*	–	13	–	17
Webster	581	–	28	–	–	–	–	–	16	–	–	1	–	15
Wright	2,663	–	117	–	–	1	–	–	83	–	–	15	–	15
Total	27,227	1,169	2,428	–	–	55	–	*	694	30	–	171	–	326
Northwest Ozark Unit														
Benton	456	84	–	–	–	3	–	–	4	–	–	–	–	5
Camden	1,136	74	–	–	–	2	–	–	24	–	–	3	–	10
Cedar	705	–	–	–	–	85	–	–	22	–	–	43	–	1
Dallas	321	–	–	–	–	–	–	–	1	–	–	1	–	5
Hickory	375	119	–	–	–	–	–	–	4	–	–	–	–	5
Laclede	1,753	25	30	–	–	–	–	–	42	–	–	24	–	10
Maries	1,887	150	14	–	–	38	–	–	72	–	–	29	–	10
Miller	798	45	–	–	–	5	–	–	9	–	–	19	–	17
Morgan	435	89	–	–	–	5	–	–	10	–	–	*	–	1
Phelps	1,818	–	85	–	–	18	–	1	73	1	–	13	–	10
Polk	312	–	–	–	–	–	–	–	1	–	–	1	–	19
Pulaski	2,023	32	67	–	–	5	–	*	68	*	–	25	–	10
St. Clair	618	22	–	–	–	6	–	–	21	–	–	2	–	2
Total	12,412	840	198	–	–	147	–	1	347	1	–	160	–	105

(Table 17 continued on next page)

(Table 17 continued)

Forest Survey Unit and county	All species	Species group: Eastern redcedar	Shortleaf pine	Cypress	Other softwoods	Soft maple	Hard maple	River birch	Hickory	Hackberry	Persimmon	Ash	Honey-locust	Black walnut
Prairie Unit														
Adair	416	–	–	–	–	30	2	–	7	*	–	6	–	6
Andrew	137	–	–	–	–	27	6	–	2	–	–	*	–	32
Atchison	316	–	–	–	–	13	–	–	2	–	–	2	–	19
Audrain	525	–	–	–	–	32	–	–	20	1	–	21	–	19
Barton	971	–	–	–	–	123	–	–	40	43	–	62	–	28
Bates	399	–	–	–	–	8	–	–	21	–	–	5	–	16
Buchanan	211	–	–	–	–	21	8	–	95	–	–	1	–	49
Caldwell	397	–	–	–	–	93	–	–	8	2	–	7	–	2
Carroll	527	–	–	–	–	91	–	–	3	16	–	5	–	10
Cass	43	–	–	–	–	7	–	–	1	–	–	1	–	13
Chanton	1,710	–	–	–	–	178	–	–	22	–	–	24	–	32
Clark	730	–	–	–	–	104	1	*	21	1	–	26	–	17
Clay	103	1	–	–	–	16	–	–	1	6	–	2	–	6
Clinton	230	–	–	–	–	22	–	–	7	4	–	3	–	7
Cooper	196	–	–	–	–	40	–	2	1	–	–	2	–	31
Dade	303	–	–	–	–	–	–	–	7	–	–	3	–	64
Daviess	613	–	–	–	–	166	–	–	17	13	–	13	–	6
De Kalb	388	–	–	–	–	51	–	–	9	4	–	4	–	29
Gentry	187	–	–	–	–	27	–	–	*	2	–	5	–	9
Greene	309	–	–	–	–	–	–	–	*	–	–	*	–	111
Grundy	381	–	–	–	–	94	–	–	11	13	–	9	–	3
Harrison	427	–	–	–	–	65	–	–	4	4	–	9	–	32
Henry	343	–	–	–	–	16	–	–	30	–	–	12	–	–
Holt	187	–	–	–	–	13	–	–	2	2	–	2	–	19
Jackson	24	1	–	–	–	3	–	–	1	–	–	–	–	*
Jasper	291	–	–	–	–	–	–	–	–	9	–	13	–	19
Johnson	19	–	–	–	–	8	–	–	–	–	–	1	–	*
Knox	621	–	–	–	–	38	2	–	6	–	–	4	–	5
Lafayette	212	–	–	–	–	57	–	2	1	5	–	5	–	*
Lawrence	812	–	–	–	–	–	–	–	5	–	–	3	–	80
Lewis	662	–	–	–	–	132	3	–	3	–	–	6	–	17
Lincoln	743	–	–	–	–	77	10	–	35	1	–	80	–	15
Linn	608	–	–	–	–	122	–	–	3	–	–	9	–	6
Livingston	664	–	–	–	–	160	–	–	13	15	–	14	–	11
Macon	782	–	–	–	–	57	2	–	10	–	–	11	–	13
Marion	580	–	–	–	–	30	8	–	18	–	–	3	–	16
Mercer	270	–	–	–	–	46	–	–	6	3	–	7	–	3
Monroe	894	5	–	–	–	46	8	–	23	–	–	16	–	13
Nodaway	71	–	–	–	–	21	–	–	*	–	–	*	–	9
Pettis	62	–	–	–	–	10	–	–	3	–	–	1	–	–
Pike	1,370	–	–	–	–	106	25	–	25	1	–	30	–	24
Platte	29	1	–	–	–	11	–	–	–	–	–	–	–	6
Putnam	299	–	–	–	–	13	–	–	42	*	–	2	–	1
Ralls	762	–	–	–	–	46	12	–	27	1	–	16	–	16
Randolph	1,673	–	–	–	–	111	1	–	28	*	–	23	–	31
Ray	201	–	–	–	–	57	–	–	2	5	–	3	–	1
Saline	358	–	–	–	–	96	–	2	1	–	–	3	–	21
Schuyler	97	–	–	–	–	26	–	–	*	*	–	2	–	2
Scotland	407	–	–	–	–	53	–	*	19	1	–	5	–	6
Shelby	451	–	–	–	–	42	2	–	10	–	–	8	–	13
Sullivan	269	–	–	–	–	43	–	–	20	*	–	5	–	1
Vernon	573	–	–	–	–	23	–	–	43	7	–	15	–	14
Worth	135	–	–	–	–	19	–	–	3	2	–	2	–	19
Total	24,185	8	–	–	–	2,867	87	5	676	160	–	504	–	930
Riverborder Unit														
Boone	846	18	–	–	–	35	–	–	22	*	–	13	–	10
Callaway	671	73	–	–	–	47	1	–	11	*	–	12	–	6
Cape Girardeau	2,005	–	–	–	–	22	21	–	153	1	–	53	–	26
Cole	294	123	–	–	–	1	–	–	2	–	–	8	–	1
Dunklin	136	–	–	1	–	12	–	–	3	–	–	3	–	–
Franklin	807	19	1	–	–	8	–	–	24	–	–	6	–	1
Gasconade	1,316	102	72	–	–	50	–	–	17	–	–	5	–	9
Howard	1,459	–	–	–	–	160	–	2	17	*	–	26	–	9
Jefferson	1,090	56	35	–	–	3	3	–	14	–	–	13	–	2
Mississippi	20	–	–	–	–	4	–	4	–	4	–	–	–	–
Moniteau	251	191	–	–	–	3	–	–	2	–	–	1	–	*
Montgomery	584	38	–	–	–	34	5	–	–	1	–	12	–	7
New Madrid	1,034	–	–	–	–	155	–	144	–	157	–	4	–	32
Osage	1,588	140	1	–	–	16	*	–	3	–	–	48	–	7
Pemiscot	143	–	–	–	–	3	–	–	–	–	–	–	–	–
Perry	1,757	11	4	–	–	17	12	–	154	1	–	54	–	44
Scott	214	–	–	–	–	*	2	–	1	*	–	14	–	1
St. Charles	945	*	–	–	–	37	*	–	27	–	–	30	–	6
St. Louis	257	*	–	–	–	8	–	–	9	–	–	4	–	3
Ste. Genevieve	879	19	11	–	–	13	2	–	29	–	–	20	–	8
Stoddard	391	–	–	–	–	15	*	–	25	–	–	13	–	*
Warren	631	1	–	–	–	55	–	–	26	–	–	22	–	10
Total	17,274	792	123	1	–	719	45	149	539	184	–	360	–	161
State total	143,301	2,699	9,130	1	105	4,048	153	325	4,655	503	9	1,657	2	1,693

(Table 17 continued on next page)

(Table 17 continued)

Forest Survey Unit and county	Species group												
	Sweetgum	Yellow-poplar	Tupelo	Sycamore	Cottonwood	Black cherry	Red oak group	White oak group	Willow	Sassafras	Basswood	Elm	Kentucky coffeetree
Eastern Ozark Unit													
Bollinger	50	20	–	63	28	11	1,509	1,042	–	–	*	18	–
Butler	14	–	1	70	28	*	1,110	429	–	–	–	7	–
Carter	*	–	6	13	1	*	1,775	820	–	–	–	9	–
Crawford	–	–	–	82	32	*	2,511	1,591	–	–	–	46	–
Dent	–	–	–	81	3	1	2,956	1,289	–	–	–	–	–
Iron	–	6	–	61	12	1	3,214	852	–	–	–	7	–
Madison	1	10	–	41	50	3	1,237	874	–	–	–	55	–
Oregon	*	–	41	71	5	19	3,854	1,223	–	2	–	1	–
Reynolds	*	8	–	48	5	1	4,640	840	–	–	–	3	–
Ripley	28	16	6	48	21	*	2,970	1,438	–	2	–	12	–
Shannon	–	–	27	9	6	*	4,387	1,630	–	–	–	3	–
St. Francois	–	1	–	18	6	1	403	239	–	–	–	–	–
Washington	–	–	–	13	4	*	2,238	1,087	–	–	–	8	–
Wayne	17	6	17	62	90	2	3,072	1,336	–	–	–	89	–
Total	111	86	98	658	288	41	35,874	14,250	–	4	*	257	–
Southwest Ozark Unit													
Barry	33	25	–	23	13	1	574	323	–	–	–	–	–
Christian	–	–	–	6	–	*	1,038	312	–	–	–	–	–
Douglas	–	–	1	37	–	2	2,458	1,224	–	–	–	5	–
Howell	–	–	2	38	12	12	3,487	1,151	–	–	–	–	–
McDonald	23	23	–	32	10	–	1,066	503	–	–	–	–	–
Newton	–	–	–	42	–	–	462	285	–	–	–	–	–
Ozark	–	–	–	4	–	*	862	338	–	–	–	–	–
Stone	–	–	18	4	–	*	294	101	–	–	–	–	–
Taney	–	–	–	–	–	*	139	208	–	–	–	–	–
Texas	–	–	22	20	2	8	2,758	1,398	–	–	–	11	–
Webster	–	–	–	2	–	*	323	175	–	–	–	–	–
Wright	1	–	–	3	–	6	1,753	668	–	–	1	–	–
Total	57	48	42	210	37	30	15,034	8,880	–	–	1	16	–
Northwest Ozark Unit													
Benton	–	–	–	3	5	*	117	238	–	–	–	–	–
Camden	–	–	–	14	–	2	483	522	–	–	–	2	–
Cedar	–	–	–	52	3	–	318	198	–	–	–	2	–
Dallas	–	–	–	2	–	*	75	237	–	–	–	–	–
Hickory	–	–	–	–	–	*	57	189	–	–	–	–	–
Laclede	–	–	–	60	–	6	834	708	–	–	–	13	–
Maries	–	–	–	104	–	2	668	561	–	–	–	21	–
Miller	–	–	–	39	117	5	270	270	–	–	–	–	–
Morgan	–	–	–	3	9	1	183	135	–	–	–	–	–
Phelps	–	–	–	80	–	1	871	875	–	–	–	9	–
Polk	–	–	–	1	–	*	30	259	–	–	–	–	–
Pulaski	–	–	–	74	–	6	1,192	541	–	–	–	5	–
St. Clair	–	–	–	*	–	–	138	427	–	–	–	–	–
Total	–	–	–	411	133	24	5,235	4,958	–	–	–	52	–

(Table 17 continued on next page)

(Table 17 continued)

Forest Survey Unit and county	Species group												
	Sweetgum	Yellow-poplar	Tupelo	Sycamore	Cottonwood	Black cherry	Red oak group	White oak group	Willow	Sassafras	Basswood	Elm	Kentucky coffeetree
Prairie Unit													
Adair	–	–	–	9	30	–	129	190	–	–	3	–	–
Andrew	–	–	–	*	30	–	19	16	–	–	3	–	*
Atchison	–	–	–	16	154	–	92	13	–	–	3	–	–
Audrain	–	–	–	25	43	–	216	143	–	–	2	1	–
Barton	–	–	–	123	34	–	296	223	–	–	–	–	–
Bates	–	–	–	56	12	–	167	90	–	–	–	2	–
Buchanan	–	–	–	*	11	–	6	13	–	–	6	–	*
Caldwell	–	–	–	10	116	–	116	40	–	–	–	1	*
Carroll	–	–	–	36	230	–	73	58	–	–	–	5	–
Cass	–	–	–	–	4	–	9	7	–	–	–	–	–
Chariton	–	–	–	24	575	–	715	141	–	–	–	–	–
Clark	–	–	3	25	202	*	148	174	–	–	3	5	–
Clay	–	–	–	6	25	–	14	19	–	–	1	2	–
Clinton	–	–	–	11	103	–	31	39	–	–	–	2	*
Cooper	–	–	–	10	16	–	61	30	1	–	2	–	–
Dade	–	–	–	21	–	–	158	53	–	–	–	–	–
Daviess	–	–	–	75	372	–	61	59	–	–	9	2	*
De Kalb	–	–	–	12	108	–	89	54	–	–	3	2	*
Gentry	–	–	–	9	76	–	40	16	–	–	–	1	*
Greene	–	–	–	*	–	*	52	145	–	–	–	–	–
Grundy	–	–	–	24	132	–	41	43	–	–	10	1	–
Harrison	–	–	–	10	95	–	126	76	–	–	3	2	*
Henry	–	–	–	11	14	–	111	150	–	–	–	–	–
Holt	–	–	–	–	20	–	92	13	–	–	3	–	–
Jackson	–	–	–	4	6	–	5	3	–	–	1	–	–
Jasper	–	–	–	40	6	–	137	67	–	–	–	–	–
Johnson	–	–	–	*	6	–	2	2	–	–	–	–	–
Knox	–	–	–	21	61	–	251	230	–	–	2	–	–
Lafayette	–	–	–	11	77	*	30	20	1	–	2	1	–
Lawrence	–	–	–	–	–	*	330	194	–	–	–	–	–
Lewis	–	–	–	26	69	–	160	237	–	–	2	3	–
Lincoln	–	–	–	32	9	–	188	317	–	–	–	20	–
Linn	–	–	–	21	152	–	203	90	–	–	–	–	–
Livingston	–	–	–	44	232	–	99	66	–	–	9	3	–
Macon	–	–	–	44	63	–	374	207	–	–	2	–	–
Marion	–	–	–	48	61	–	214	176	–	–	10	–	–
Mercer	–	–	–	9	115	–	49	31	–	–	1	1	–
Monroe	–	–	–	55	76	–	414	234	–	–	3	–	–
Nodaway	–	–	–	*	9	–	16	15	–	–	–	–	*
Pettis	–	–	–	2	13	1	7	25	–	–	–	–	–
Pike	–	–	–	36	48	–	623	437	–	–	3	14	–
Platte	–	–	–	–	1	–	2	6	–	–	1	–	–
Putnam	–	–	–	–	44	–	38	157	–	–	3	–	–
Ralls	–	–	–	52	75	–	263	230	–	–	14	6	–
Randolph	–	–	–	57	272	*	1,111	240	–	–	*	*	–
Ray	–	–	–	9	66	–	13	23	–	–	–	1	–
Saline	–	–	–	26	55	1	90	62	1	–	2	–	–
Schuyler	–	–	–	3	6	–	26	27	–	–	1	–	–
Scotland	–	–	–	9	116	–	120	62	–	–	2	13	–
Shelby	–	–	–	23	33	–	163	155	–	–	2	–	–
Sullivan	–	–	–	1	90	–	88	60	–	–	1	–	–
Vernon	–	–	–	40	16	–	277	125	–	–	–	12	–
Worth	–	–	–	2	16	–	9	57	–	–	3	1	–
Total	–	–	3	1,131	4,227	2	6,162	5,365	2	–	114	100	2
Riverborder Unit													
Boone	–	–	–	33	31	–	324	360	–	–	–	*	–
Callaway	–	–	–	19	49	–	379	273	–	–	1	1	–
Cape Girardeau	16	61	–	16	13	11	858	745	–	–	5	*	–
Cole	–	–	–	5	6	–	59	91	–	–	–	–	–
Dunklin	6	–	–	10	52	–	25	24	–	–	–	–	–
Franklin	–	–	–	10	4	3	268	262	–	–	–	4	–
Gasconade	–	–	–	32	30	1	498	493	–	–	–	7	–
Howard	–	–	–	188	508	–	363	166	1	–	2	*	–
Jefferson	–	13	–	4	*	5	468	472	–	–	–	2	–
Mississippi	–	–	–	–	4	–	–	–	–	–	–	4	–
Monteau	–	–	–	2	6	–	29	16	–	–	–	–	–
Montgomery	–	–	–	26	66	–	185	202	–	–	–	3	–
New Madrid	–	–	–	2	290	3	80	17	–	–	–	149	–
Osage	–	–	–	42	44	–	766	497	–	–	–	1	–
Perniscot	–	–	–	2	137	–	–	–	–	–	–	–	–
Perry	2	46	–	17	13	11	708	663	–	–	–	–	–
Scott	*	12	–	*	13	2	96	73	–	–	–	–	–
St. Charles	–	–	–	37	555	–	114	127	–	–	–	11	–
St. Louis	–	–	–	6	–	–	127	98	–	–	–	1	–
Ste. Genevieve	–	7	–	14	11	4	377	362	–	–	–	1	–
Stoddard	12	*	–	33	6	*	140	145	–	–	–	–	–
Warren	–	–	–	32	43	*	161	250	–	–	–	31	–
Total	36	140	–	515	1,887	39	6,003	5,356	1	–	7	216	–
State total	204	253	142	2,924	6,573	137	70,309	38,609	3	4	122	841	2

* Less than 500 cubic feet.

Table 18. – Sawtimber removals from timberland for industrial roundwood by Forest Survey Unit, county, and species group, Missouri, 1997

(In thousand board feet) [1]

Forest Survey Unit and county	All species	Species group												
		Eastern redcedar	Shortleaf pine	Cypress	Other softwoods	Soft maple	Hard maple	River birch	Hickory	Hackberry	Persimmon	Ash	Honey-locust	Black walnut
Eastern Ozark Unit														
Bollinger	11,498	–	22	–	–	262	34	52	663	51	–	226	–	26
Butler	10,858	–	3,634	–	–	101	–	124	437	1	–	132	–	47
Carter	13,123	–	3,315	–	–	4	–	–	581	–	–	58	–	44
Crawford	16,302	7	651	–	–	184	4	–	674	–	–	138	–	22
Dent	16,133	21	1,507	–	–	–	–	4	595	4	–	15	–	44
Iron	17,857	42	1,352	–	–	140	8	–	748	–	–	15	–	25
Madison	10,200	18	1,237	–	71	220	5	160	274	175	–	224	–	47
Oregon	22,379	10	2,134	–	–	8	–	–	764	6	–	111	–	122
Reynolds	25,844	18	4,233	–	–	17	3	–	903	–	–	32	–	46
Ripley	20,823	–	2,169	–	–	198	7	–	1,239	25	33	250	7	67
Shannon	28,659	25	5,375	–	–	–	–	–	1,099	–	–	2	–	109
St. Francois	2,968	38	137	–	–	41	5	–	117	–	–	33	–	10
Washington	15,185	218	2,384	–	–	55	4	–	274	–	–	1	–	22
Wayne	22,910	17	2,823	–	72	507	10	358	893	360	–	802	–	47
Total	238,336	408	31,173	–	143	1,736	81	699	9,258	623	33	1,842	7	681
Southwest Ozark Unit														
Barry	5,353	513	460	–	–	29	–	–	258	–	–	61	–	261
Christian	5,539	50	213	–	–	–	–	–	98	–	–	23	–	153
Douglas	16,241	101	1,764	–	–	–	–	–	502	–	–	95	–	71
Howell	19,873	–	1,205	–	–	98	–	–	677	–	–	117	–	75
McDonald	7,009	56	78	–	–	–	–	–	320	70	–	72	–	198
Newton	3,582	–	103	–	–	–	–	–	51	43	–	61	–	268
Ozark	4,782	134	504	–	–	8	–	–	157	–	–	64	–	71
Stone	2,443	102	589	–	–	–	–	–	65	–	–	–	–	93
Taney	2,335	782	–	–	–	–	–	–	95	–	–	39	–	67
Texas	21,728	19	5,849	–	–	79	–	1	605	1	–	52	–	76
Webster	2,148	–	131	–	–	–	–	–	69	–	–	6	–	87
Wright	9,876	–	492	–	–	6	–	–	320	–	–	57	–	67
Total	100,691	1,740	11,204	–	–	216	–	1	3,438	114	–	667	–	1,465
Northwest Ozark Unit														
Benton	1,956	441	–	–	–	17	–	–	14	–	–	–	–	24
Camden	4,216	174	–	–	–	6	–	–	91	–	–	12	–	43
Cedar	2,709	–	–	–	–	251	–	–	88	–	–	165	–	4
Dallas	1,394	–	–	–	–	–	–	–	4	–	–	3	–	23
Hickory	1,842	561	–	–	–	–	–	–	16	–	–	–	–	23
Laclede	8,525	120	45	–	–	–	–	–	155	–	–	63	–	47
Maries	5,973	436	74	–	–	140	–	–	276	–	–	113	–	46
Miller	3,312	207	–	–	–	20	–	–	34	–	–	72	–	76
Morgan	1,798	446	–	–	–	26	–	–	37	–	–	1	–	4
Phelps	6,908	–	299	–	–	89	–	3	280	3	–	51	–	44
Polk	1,455	–	–	–	–	–	–	–	3	–	–	3	–	67
Pulaski	7,683	127	344	–	–	16	–	1	254	1	–	96	–	44
St. Clair	2,393	116	–	–	–	32	–	–	61	–	–	7	–	7
Total	47,963	2,630	762	–	–	580	–	5	1,330	5	–	608	–	473

(Table 18 continued on next page)

(Table 16 continued)

Forest Survey Unit and county	All species	Species group: Eastern redcedar	Shortleaf pine	Cypress	Other softwoods	Soft maple	Hard maple	River birch	Hickory	Hackberry	Persimmon	Ash	Honey-locust	Black walnut
Prairie Unit														
Adair	1,740	–	–	–	–	114	9	–	27	1	–	30	–	35
Andrew	602	–	–	–	–	104	25	–	9	–	–	1	–	144
Atchison	1,508	–	–	–	–	50	–	–	6	–	–	10	–	88
Audrain	2,101	–	–	–	–	123	–	–	77	2	–	62	–	86
Barton	3,814	–	–	–	–	476	–	–	153	188	–	237	–	125
Bates	1,516	–	–	–	–	32	–	–	61	–	–	19	–	79
Buchanan	866	–	–	–	–	80	25	–	366	–	–	8	–	220
Caldwell	1,726	–	–	–	–	358	–	–	31	6	–	28	–	11
Carroll	2,460	–	–	–	–	350	–	–	10	60	–	21	–	46
Cass	179	–	–	–	–	27	–	–	4	–	–	6	–	57
Chariton	7,810	–	–	–	–	680	–	–	88	–	–	92	–	145
Clark	3,007	–	–	–	–	388	*	2	75	5	–	102	–	76
Clay	451	6	–	–	–	73	–	–	3	24	–	6	–	25
Clinton	1,080	–	–	–	–	64	–	–	26	15	–	12	–	30
Cooper	809	–	–	–	–	159	–	8	2	–	–	9	–	139
Dade	1,189	–	–	–	–	–	–	–	27	–	–	12	–	286
Daviess	3,033	–	–	–	–	484	–	–	67	50	–	49	–	25
De Kalb	1,811	–	–	–	–	196	–	–	38	15	–	17	–	131
Gentry	889	–	–	–	–	102	–	–	1	9	–	20	–	40
Greene	1,355	–	–	–	–	–	–	–	1	–	–	1	–	500
Grundy	1,709	–	–	–	–	363	–	–	42	51	–	33	–	12
Harrison	1,811	–	–	–	–	250	–	–	15	15	–	34	–	144
Henry	1,300	–	–	–	–	84	–	–	114	–	–	45	–	–
Holt	675	–	–	–	–	50	–	–	6	10	–	10	–	86
Jackson	105	6	–	–	–	14	–	–	2	–	–	–	–	1
Jasper	1,106	–	–	–	–	–	–	–	–	34	–	51	–	85
Johnson	84	–	–	–	–	32	–	–	–	–	–	6	–	1
Knox	2,636	–	–	–	–	138	6	–	32	–	–	17	–	24
Lafayette	962	–	–	–	–	223	–	8	3	16	–	21	–	1
Lawrence	2,396	–	–	–	–	–	–	–	19	–	–	11	–	359
Lewis	2,557	–	–	–	–	443	10	–	11	–	–	32	–	76
Lincoln	2,930	–	–	–	–	296	40	–	133	2	–	233	–	69
Linn	2,589	–	–	–	–	472	–	–	10	–	–	33	–	38
Livingston	2,989	–	–	–	–	618	–	–	46	58	–	55	–	50
Macon	3,105	–	–	–	–	216	7	–	38	–	–	44	–	59
Marion	2,426	–	–	–	–	118	22	–	62	–	–	12	–	71
Mercer	1,250	–	–	–	–	176	–	–	23	11	–	26	–	14
Monroe	3,530	6	–	–	–	178	30	–	90	–	–	69	–	58
Nodaway	294	–	–	–	–	61	–	–	1	–	–	1	–	39
Pettis	264	–	–	–	–	44	–	–	9	–	–	6	–	–
Pike	5,273	–	–	–	–	366	97	–	92	2	–	118	–	108
Platte	122	6	–	–	–	44	–	–	–	–	–	–	–	25
Putnam	1,201	–	–	–	–	50	–	–	160	2	–	7	–	5
Ralls	3,063	–	–	–	–	177	47	–	106	2	–	69	–	61
Randolph	7,448	–	–	–	–	405	3	–	100	*	–	90	–	142
Ray	938	–	–	–	–	219	–	–	8	18	–	11	–	5
Saline	1,515	–	–	–	–	377	–	8	3	–	–	13	–	95
Schuyler	381	–	–	–	–	101	–	–	2	2	–	7	–	11
Scotland	1,768	–	–	–	–	205	–	1	74	4	–	20	–	29
Shelby	1,883	–	–	–	–	182	8	–	38	–	–	29	–	59
Sullivan	1,271	–	–	–	–	164	–	–	76	2	–	21	–	5
Vernon	2,171	–	–	–	–	89	–	–	167	26	–	57	–	61
Worth	554	–	–	–	–	74	–	–	12	6	–	7	–	86
Total	99,817	24	–	–	–	10,045	331	28	2,594	816	–	1,943	–	4,186
Riverborder Unit														
Boone	3,423	45	–	–	–	137	–	–	83	*	–	49	–	44
Callaway	3,328	186	–	–	–	160	4	–	41	*	–	44	–	27
Cape Girardeau	7,896	–	–	–	–	64	80	–	590	3	–	206	–	124
Cole	1,308	580	–	–	–	2	–	–	8	–	–	22	–	3
Dunklin	818	–	–	7	–	46	–	–	10	–	–	10	–	–
Franklin	2,421	82	4	–	–	22	–	–	93	–	–	31	–	3
Gasconade	5,140	379	388	–	–	194	–	–	67	–	–	18	–	39
Howard	8,238	–	–	–	–	626	–	6	67	*	–	99	–	39
Jefferson	4,129	188	179	–	–	13	10	–	53	–	–	50	–	6
Mississippi	85	–	–	–	–	17	–	16	–	17	–	–	–	–
Moniteau	1,173	937	–	–	–	16	–	–	7	–	–	3	–	1
Montgomery	2,175	97	–	–	–	104	19	–	–	2	–	47	–	30
New Madrid	4,524	–	–	–	–	855	–	609	–	664	–	16	–	145
Osage	5,973	570	6	–	–	70	*	–	12	–	–	188	–	31
Pemiscot	814	–	–	–	–	13	–	–	–	–	–	–	–	–
Perry	8,789	12	20	–	–	64	45	–	594	6	–	209	–	196
Scott	820	–	–	–	–	1	7	–	2	*	–	53	–	5
St. Charles	4,747	*	–	–	–	143	2	–	104	–	–	115	–	26
St. Louis	1,000	*	–	–	–	29	–	–	38	–	–	14	–	12
Ste. Genevieve	3,420	21	59	–	–	52	8	–	114	–	–	78	–	37
Stoddard	1,507	–	–	–	–	57	*	–	95	–	–	52	–	*
Warren	2,527	1	–	–	–	213	–	–	99	–	–	86	–	46
Total	69,829	3,059	835	7	–	2,740	175	633	2,076	893	–	1,387	–	615
State total	556,637	7,860	43,774	7	143	15,321	588	1,366	18,695	2,050	33	6,447	7	7,620

(Table 16 continued on next page)

(Table 18 continued)

Forest Survey Unit and county	Species group												
	Sweetgum	Yellow-poplar	Tupelo	Sycamore	Cottonwood	Black cherry	Red oak group	White oak group	Willow	Sassafras	Basswood	Elm	Kentucky coffeetree
Eastern Ozark Unit													
Bollinger	192	77	--	242	129	45	5,522	3,685	--	--	1	84	--
Butler	54	--	3	270	149	1	4,060	1,818	--	--	--	29	--
Carter	1	--	23	50	7	1	8,490	2,515	--	--	--	35	--
Crawford	--	--	--	315	185	1	9,174	8,589	--	--	--	178	--
Dent	--	--	--	234	18	5	10,766	4,919	--	--	--	--	--
Iron	--	29	--	235	70	5	11,761	3,201	--	--	--	26	--
Madison	5	36	--	180	222	12	4,543	2,563	--	--	--	227	--
Oregon	1	--	158	272	26	77	14,130	4,547	--	7	--	3	--
Reynolds	1	23	--	163	26	4	16,981	3,160	--	--	--	13	--
Ripley	109	61	23	165	124	1	10,695	5,378	--	7	--	46	--
Shannon	--	--	103	34	44	2	15,632	6,023	--	--	--	12	--
St. Francois	--	4	--	83	36	5	1,475	1,007	--	--	--	--	--
Washington	--	--	--	48	21	1	8,181	3,948	--	--	--	30	--
Wayne	88	22	88	236	366	6	11,263	4,999	--	--	--	375	--
Total	426	254	376	2,527	1,446	164	131,054	54,348	--	14	1	1,041	--
Southwest Ozark Unit													
Barry	127	95	--	122	73	8	2,101	1,226	--	--	--	--	--
Christian	--	--	--	21	--	2	3,797	1,184	--	--	--	--	--
Douglas	--	--	2	142	--	8	8,995	4,521	--	--	--	21	--
Howell	--	--	8	145	71	48	12,704	4,329	--	--	--	--	--
McDonald	66	88	--	124	56	--	3,980	1,662	--	--	--	--	--
Newton	--	--	--	181	--	--	1,765	1,131	--	--	--	--	--
Ozark	--	--	--	17	--	2	2,453	1,354	--	--	--	--	--
Stone	--	--	89	18	--	1	1,078	411	--	--	--	--	--
Taney	--	--	--	--	--	2	540	830	--	--	--	--	--
Texas	--	--	83	77	13	24	9,893	5,110	--	--	--	42	--
Webster	--	--	--	7	--	2	1,183	683	--	--	--	--	--
Wright	8	--	--	12	--	23	6,411	2,463	--	--	2	--	--
Total	220	183	180	843	213	117	54,898	25,143	--	--	2	83	--
Northwest Ozark Unit													
Benton	--	--	--	12	25	1	428	994	--	--	--	--	--
Camden	--	--	--	55	--	9	1,787	2,052	--	--	--	8	--
Cedar	--	--	--	200	18	--	1,185	812	--	--	--	10	--
Dallas	--	--	--	7	--	1	278	1,080	--	--	--	--	--
Hickory	--	--	--	--	--	1	207	834	--	--	--	--	--
Laclede	--	--	--	221	--	22	2,998	2,792	--	--	--	43	--
Maries	--	--	--	401	--	7	2,333	2,088	--	--	--	79	--
Miller	--	--	--	152	874	18	989	1,071	--	--	--	--	--
Morgan	--	--	--	13	49	4	671	547	--	--	--	--	--
Phelps	--	--	--	230	--	4	3,162	2,705	--	--	--	35	--
Polk	--	--	--	8	--	1	110	1,246	--	--	--	--	--
Pulaski	--	--	--	265	--	23	4,362	2,108	--	--	--	16	--
St. Clair	--	--	--	1	--	--	497	1,851	--	--	--	--	--
Total	--	--	--	1,583	785	91	18,963	19,956	--	--	--	192	--

(Table 18 continued on next page)

(Table 16 continued)

Forest Survey Unit and county	Species group												
	Sweetgum	Yellow-poplar	Tupelo	Sycamore	Cottonwood	Black cherry	Red oak group	White oak group	Willow	Sassafras	Basswood	Elm	Kentucky coffeetree
Prairie Unit													
Adair	–	–	–	35	173	–	472	834	–	–	11	–	–
Andrew	–	–	–	1	173	–	72	62	–	–	11	–	1
Atchison	–	–	–	69	887	–	337	50	–	–	11	–	–
Audrain	–	–	–	95	246	–	797	579	–	–	9	3	–
Barton	–	–	–	473	198	–	1,082	904	–	–	–	–	–
Bates	–	–	–	214	70	–	883	331	–	–	–	9	–
Buchanan	–	–	–	1	66	–	26	50	–	–	23	–	1
Caldwell	–	–	–	39	679	–	423	146	–	–	–	3	1
Carroll	–	–	–	140	1,327	–	267	220	–	–	–	19	–
Cass	–	–	–	–	24	–	34	27	–	–	–	–	–
Chariton	–	–	–	91	3,322	–	2,616	576	–	–	–	–	–
Clark	–	–	2	93	1,093	1	536	634	–		11	6	–
Clay	–	–	–	32	145	–	50	71	–	–	6	9	–
Clinton	–	–	–	44	598	–	115	145	–	–	–	6	1
Cooper	–	–	–	41	100	–	223	114	4	–	6	–	–
Dade	–	–	–	61	–	–	571	193	–	–	–	–	–
Daviess	–	–	–	172	1,650	–	296	216	–	–	35	7	1
De Kalb	–	–	–	45	624	–	327	202	–		11	6	1
Gentry	–	–	–	34	449	–	147	83	–	–	–	3	1
Greene	–	–	–	1	–	1	190	662	–	–	–	–	–
Grundy	–	–	–	93	763	–	149	158	–	–	38	6	–
Harrison	–	–	–	39	548	–	460	288	–	–	11	6	1
Henry	–	–	–	41	83	–	406	546	–	–	–	–	–
Holt	–	–	–	–	115	–	337	50	–	–	11	–	–
Jackson	–	–	–	14	33	–	17	11	–	–	6	–	–
Jasper	–	–	–	153	35	–	501	248	–	–	–	–	–
Johnson	–	–	–	2	32	–	6	6	–	–	–	–	–
Knox	–	–	–	61	352	–	921	1,056	–	–	6	–	–
Lafayette	–	–	–	42	445	*	109	75	4	–	6	6	–
Lawrence	–	–	–	–	–	1	1,206	788	–	–	–	–	–
Lewis	–	–	–	90	305	–	561	997	–	–	6	2	–
Lincoln	–	–	–	124	53	–	608	1,292	–	–	–	76	–
Linn	–	–	–	60	880	–	742	334	–	–	–	–	–
Livingston	–	–	–	168	1,341	–	381	250	–	–	35	10	–
Macon	–	–	–	170	363	–	1,368	831	–	–	6	–	–
Marion	–	–	–	188	354	–	783	760	–	–	40	–	–
Mercer	–	–	–	33	665	–	161	114	–	–	4	3	–
Monroe	–	–	–	213	439	–	1,514	925	–	–	10	–	–
Nodaway	–	–	–	*	54	–	60	57	–	–	–	–	*
Pettis	–	–	–	12	70	1	26	96	–	–	–	–	–
Pike	–	–	–	133	234	–	2,273	1,805	–	–	10	37	–
Platte	–	–	–	–	6	–	9	26	–	–	6	–	–
Putnam	–	–	–	–	254	–	140	573	–	–	10	–	–
Ralls	–	–	–	200	435	–	981	908	–	–	53	24	–
Randolph	–	–	–	203	1,506	*	4,065	930	–	–	2	1	–
Ray	–	–	–	35	499	–	50	88	–	–	–	6	–
Saline	–	–	–	102	315	3	329	258	4	–	6	–	–
Schuyler	–	–	–	10	45	–	101	97	–	–	5	–	–
Scotland	–	–	–	33	672	–	440	231	–	–	10	49	–
Shelby	–	–	–	67	192	–	598	703	–	–	6	–	–
Sullivan	–	–	–	3	516	–	250	229	–	–	3	–	–
Vernon	–	–	–	158	94	–	1,013	459	–	–	–	47	–
Worth	–	–	–	6	102	–	33	212	–	–	11	3	–
Total	–	–	2	4,215	23,629	7	29,866	21,513	12	–	452	347	7
Riverborder Unit													
Boone	–	–	–	126	177	–	1,167	1,572	–	–	–	1	–
Callaway	–	–	–	61	283	–	1,386	1,086	–	–	2	3	–
Cape Girardeau	61	237	–	70	76	43	3,141	2,964	–	–	19	*	–
Cole	–	–	–	19	43	–	217	414	–	–	–	–	–
Dunklin	23	–	–	40	300	–	92	67	–	–	–	–	–
Franklin	–	–	–	40	23	11	972	1,142	–	–	–	16	–
Gasconade	–	–	–	127	170	4	1,623	1,924	–	–	–	26	–
Howard	–	–	–	601	2,716	–	1,327	738	4	–	6	*	–
Jefferson	–	51	–	15	3	19	1,711	1,642	–	–	–	7	–
Mississippi	–	–	–	–	16	–	–	–	–	–	–	17	–
Moniteau	–	–	–	11	33	–	106	59	–	–	–	–	–
Montgomery	–	–	–	94	315	–	604	649	–	–	–	13	–
New Madrid	–	–	–	6	1,431	10	291	84	–	–	–	632	–
Osage	–	–	–	161	255	–	2,804	1,874	–	–	–	5	–
Pemiscot	–	–	–	7	794	–	–	–	–	–	–	–	–
Perry	7	177	–	65	74	43	2,590	2,666	–	–	–	–	–
Scott	*	46	–	1	76	7	350	272	–	–	–	–	–
St. Charles	–	–	–	141	3,206	–	416	545	–	–	–	44	–
St. Louis	–	–	–	29	–	–	464	411	–	–	–	5	–
Ste. Genevieve	–	26	–	55	66	14	1,379	1,510	–	–	–	3	–
Stoddard	47	1	–	127	43	*	513	571	–	–	–	–	–
Warren	–	–	–	124	246	*	591	1,004	–	–	–	116	–
Total	138	538	–	1,944	10,350	152	21,969	21,595	4	–	29	890	–
State total	766	976	539	11,112	38,403	531	256,771	142,554	17	14	485	2,532	7

* Less than 500 board feet.

Table 19 – Harvest residue generated by industrial roundwood harvesting by Forest Survey Unit, county, and species group, Missouri, 1997

(In thousand cubic feet)

Forest Survey Unit and county	All species	Species group												
		Eastern redcedar	Shortleaf pine	Cypress	Other softwoods	Soft maple	Hard maple	River birch	Hickory	Hackberry	Persimmon	Ash	Honey-locust	Black walnut
Eastern Ozark Unit														
Bollinger	2,201	–	3	–	–	61	6	3	166	2	–	47	–	4
Butler	1,669	–	473	–	–	26	–	35	122	*	–	37	–	6
Carter	2,205	–	407	–	–	1	–	–	162	–	–	16	–	6
Crawford	3,167	5	104	–	–	51	*	–	188	–	–	39	–	3
Dent	3,276	7	166	–	–	–	–	1	166	1	–	4	–	6
Iron	3,339	34	165	–	–	39	1	–	205	–	–	4	–	3
Madison	1,661	13	151	–	5	20	1	6	74	6	–	19	–	6
Oregon	4,084	6	261	–	–	2	–	–	191	2	–	22	–	16
Reynolds	4,632	15	517	–	–	5	1	–	249	–	–	9	–	6
Ripley	3,636	–	264	–	–	55	*	–	323	7	9	61	2	9
Shannon	5,125	17	662	–	–	–	–	–	304	–	–	*	–	15
St. Francois	531	29	17	–	–	12	1	–	33	–	–	9	–	1
Washington	2,761	69	292	–	–	15	*	–	77	–	–	*	–	3
Wayne	3,666	14	320	–	6	57	2	20	249	13	–	76	–	6
Total	42,551	211	3,623	–	11	346	15	65	2,511	32	9	346	2	91
Southwest Ozark Unit														
Barry	904	62	12	–	–	1	–	–	70	–	–	22	–	35
Christian	1,049	40	26	–	–	–	–	–	27	–	–	6	–	19
Douglas	3,060	75	216	–	–	–	–	–	140	–	–	27	–	9
Howell	3,612	–	146	–	–	27	–	–	222	–	–	24	–	10
McDonald	1,336	2	2	–	–	–	–	–	87	20	–	20	–	26
Newton	641	–	13	–	–	–	–	–	14	12	–	17	–	35
Ozark	620	106	61	–	–	2	–	–	21	–	–	9	–	9
Stone	473	62	72	–	–	–	–	–	24	–	–	–	–	11
Taney	705	522	–	–	–	–	–	–	4	–	–	2	–	9
Texas	3,760	5	702	–	–	22	–	*	169	*	–	14	–	10
Webster	362	–	16	–	–	–	–	–	19	–	–	2	–	9
Wright	1,652	–	62	–	–	2	–	–	69	–	–	16	–	9
Total	16,616	917	1,332	–	–	54	–	*	666	32	–	159	–	193
Northwest Ozark Unit														
Benton	227	13	–	–	–	*	–	–	4	–	–	–	–	3
Camden	760	49	–	–	–	2	–	–	25	–	–	3	–	6
Cedar	532	–	–	–	–	70	–	–	24	–	–	46	–	*
Dallas	159	–	–	–	–	–	–	–	1	–	–	1	–	3
Hickory	165	30	–	–	–	–	–	–	4	–	–	–	–	3
Laclede	1,040	6	7	–	–	–	–	–	37	–	–	16	–	6
Maries	1,192	64	9	–	–	39	–	–	77	–	–	32	–	6
Miller	533	13	–	–	–	6	–	–	9	–	–	20	–	10
Morgan	236	16	–	–	–	1	–	–	10	–	–	*	–	*
Phelps	1,232	–	36	–	–	19	–	1	76	1	–	14	–	6
Polk	125	–	–	–	–	–	–	–	1	–	–	1	–	10
Pulaski	1,420	12	42	–	–	5	–	*	71	*	–	27	–	6
St. Clair	401	3	–	–	–	9	–	–	23	–	–	2	–	1
Total	6,023	226	96	–	–	151	–	1	364	1	–	183	–	61

(Table 19 continued on next page)

(Table 19 continued)

Forest Survey Unit and county	All species	Species group												
		Eastern redcedar	Shortleaf pine	Cypress	Other softwoods	Soft maple	Hard maple	River birch	Hickory	Hackberry	Persimmon	Ash	Honey-locust	Black walnut
Prairie Unit														
Adair	267	–	–	–	–	32	2	–	8	*	–	6	–	5
Andrew	101	–	–	–	–	29	7	–	3	–	–	*	–	19
Atchison	222	–	–	–	–	14	–	–	2	–	–	3	–	11
Audrain	383	–	–	–	–	34	–	–	22	1	–	23	–	12
Barton	780	–	–	–	–	133	–	–	37	48	–	60	–	16
Bates	309	–	–	–	–	9	–	–	23	–	–	5	–	10
Buchanan	132	–	–	–	–	22	7	–	49	–	–	2	–	27
Caldwell	316	–	–	–	–	100	–	–	9	2	–	6	–	1
Carroll	402	–	–	–	–	98	–	–	3	17	–	6	–	6
Cass	32	–	–	–	–	6	–	–	1	–	–	2	–	7
Chariton	1,230	–	–	–	–	190	–	–	24	–	–	26	–	19
Clark	529	–	–	–	–	101	*	1	21	1	–	28	–	10
Clay	76	*	–	–	–	19	–	–	1	7	–	2	–	1
Clinton	170	–	–	–	–	24	–	–	6	4	–	3	–	3
Cooper	135	–	–	–	–	40	–	*	1	–	–	3	–	16
Dade	215	–	–	–	–	–	–	–	7	–	–	3	–	37
Daviess	502	–	–	–	–	120	–	–	19	14	–	14	–	3
De Kalb	274	–	–	–	–	55	–	–	10	4	–	5	–	17
Gentry	136	–	–	–	–	29	–	–	*	3	–	6	–	4
Greene	159	–	–	–	–	–	–	–	*	–	–	*	–	61
Grundy	317	–	–	–	–	101	–	–	12	14	–	9	–	1
Harrison	325	–	–	–	–	70	–	–	4	4	–	10	–	19
Henry	261	–	–	–	–	16	–	–	32	–	–	13	–	–
Holt	116	–	–	–	–	14	–	–	2	3	–	3	–	11
Jackson	16	*	–	–	–	2	–	–	1	–	–	–	–	*
Jasper	223	–	–	–	–	–	–	–	–	10	–	14	–	11
Johnson	15	–	–	–	–	6	–	–	–	–	–	2	–	*
Knox	385	–	–	–	–	38	2	–	9	–	–	5	–	3
Lafayette	170	–	–	–	–	61	–	*	1	5	–	6	–	*
Lawrence	392	–	–	–	–	–	–	–	5	–	–	3	–	47
Lewis	426	–	–	–	–	120	2	–	3	–	–	9	–	10
Lincoln	550	–	–	–	–	83	11	–	37	1	–	65	–	9
Linn	466	–	–	–	–	132	–	–	3	–	–	9	–	5
Livingston	537	–	–	–	–	172	–	–	13	18	–	15	–	6
Macon	558	–	–	–	–	61	2	–	10	–	–	12	–	6
Marion	390	–	–	–	–	32	6	–	17	–	–	3	–	9
Mercer	205	–	–	–	–	49	–	–	6	3	–	7	–	1
Monroe	647	4	–	–	–	49	7	–	25	–	–	19	–	6
Nodaway	51	–	–	–	–	23	–	–	*	–	–	*	–	5
Pettis	29	–	–	–	–	6	–	–	2	–	–	2	–	–
Pike	929	–	–	–	–	100	26	–	25	1	–	32	–	14
Platte	15	*	–	–	–	11	–	–	–	–	–	–	–	1
Putnam	229	–	–	–	–	14	–	–	45	1	–	2	–	1
Ralls	560	–	–	–	–	49	13	–	30	1	–	19	–	10
Randolph	1,321	–	–	–	–	112	1	–	26	*	–	25	–	19
Ray	161	–	–	–	–	61	–	–	2	5	–	3	–	*
Saline	264	–	–	–	–	99	–	*	1	–	–	4	–	13
Schuyler	80	–	–	–	–	26	–	–	1	1	–	2	–	1
Scotland	308	–	–	–	–	57	–	*	21	1	–	8	–	4
Shelby	297	–	–	–	–	45	2	–	11	–	–	6	–	6
Sullivan	220	–	–	–	–	48	–	–	21	1	–	6	–	1
Vernon	449	–	–	–	–	25	–	–	47	6	–	16	–	6
Worth	99	–	–	–	–	21	–	–	3	2	–	2	–	11
Total	17,380	5	–	–	–	2,756	89	1	665	172	–	538	–	529
Riverborder Unit														
Boone	538	11	–	–	–	38	–	–	23	*	–	14	–	6
Callaway	584	46	–	–	–	50	1	–	12	*	–	12	–	3
Cape Girardeau	1,323	–	–	–	–	23	22	–	92	1	–	57	–	6
Cole	125	30	–	–	–	1	–	–	2	–	–	6	–	*
Dunklin	105	–	–	1	–	13	–	–	3	–	–	3	–	–
Franklin	364	9	*	–	–	6	–	–	26	–	–	9	–	*
Gasconade	882	43	45	–	–	54	–	–	19	–	–	5	–	5
Howard	1,038	–	–	–	–	164	–	*	19	*	–	28	–	5
Jefferson	729	31	22	–	–	4	3	–	12	–	–	14	–	1
Mississippi	3	–	–	–	–	1	–	1	–	1	–	–	–	–
Moniteau	79	42	–	–	–	1	–	–	2	–	–	1	–	*
Montgomery	356	24	–	–	–	26	5	–	–	1	–	13	–	4
New Madrid	302	–	–	–	–	27	–	22	–	24	–	5	–	20
Osage	1,063	51	1	–	–	19	*	–	3	–	–	52	–	4
Perniscot	95	–	–	–	–	4	–	–	–	–	–	–	–	–
Perry	1,188	10	2	–	–	16	12	–	93	2	–	58	–	27
Scott	155	–	–	–	–	*	2	–	1	*	–	15	–	1
St. Charles	661	*	–	–	–	40	*	–	29	–	–	32	–	3
St. Louis	173	*	–	–	–	6	–	–	10	–	–	4	–	2
Ste. Genevieve	586	17	7	–	–	14	2	–	29	–	–	21	–	5
Stoddard	290	–	–	–	–	16	*	–	26	–	–	15	–	*
Warren	460	1	–	–	–	60	–	–	26	–	–	24	–	6
Total	11,124	316	77	1	–	589	47	23	429	26	–	386	–	100
State total	97,694	1,877	5,329	1	11	3,899	152	91	4,856	265	9	1,590	2	975

(Table 19 continued on next page)

(Table 19 continued)

Forest Survey Unit and county	Species group												
	Sweetgum	Yellow-poplar	Tupelo	Sycamore	Cottonwood	Black cherry	Red oak group	White oak group	Willow	Sassafras	Basswood	Elm	Kentucky coffeetree
Eastern Ozark Unit													
Bollinger	54	22	–	87	11	7	1,041	697	–	–	*	8	–
Butler	15	–	1	75	17	*	789	282	–	–	–	8	–
Carter	*	–	6	14	1	*	1,226	353	–	–	–	10	–
Crawford	–	–	–	88	21	*	1,740	876	–	–	–	50	–
Dent	–	–	–	85	2	1	2,041	793	–	–	–	–	–
Iron	–	8	–	88	8	1	2,231	588	–	–	–	8	–
Madison	1	11	–	45	12	2	840	428	–	–	–	23	–
Oregon	*	–	44	78	3	6	2,645	603	–	2	–	1	–
Reynolds	*	6	–	51	3	1	3,217	548	–	–	–	4	–
Ripley	30	17	6	52	14	*	2,032	939	–	2	–	13	–
Shannon	–	–	29	9	5	1	2,994	1,086	–	–	–	3	–
St. Francois	–	1	–	16	4	1	280	128	–	–	–	–	–
Washington	–	–	–	13	2	*	1,552	726	–	–	–	8	–
Wayne	18	8	18	88	18	2	2,091	863	–	–	–	21	–
Total	119	71	105	705	118	24	24,700	9,088	–	4	*	155	–
Southwest Ozark Unit													
Barry	35	27	–	3	8	*	396	209	–	–	–	–	–
Christian	–	–	–	6	–	1	720	204	–	–	–	–	–
Douglas	–	–	1	39	–	1	1,708	837	–	–	–	6	–
Howell	–	–	2	40	8	13	2,375	742	–	–	–	–	–
McDonald	24	24	–	34	6	–	755	338	–	–	–	–	–
Newton	–	–	–	45	–	–	335	171	–	–	–	–	–
Ozark	–	–	–	5	–	1	430	173	–	–	–	–	–
Stone	–	–	19	4	–	*	203	57	–	–	–	–	–
Taney	–	–	–	–	–	1	87	99	–	–	–	–	–
Texas	–	–	23	21	1	7	1,868	923	–	–	–	12	–
Webster	–	–	–	2	–	1	224	109	–	–	–	–	–
Wright	2	–	–	3	–	8	1,215	449	–	–	1	–	–
Total	62	51	45	204	24	30	10,297	4,310	–	–	1	18	–
Northwest Ozark Unit													
Benton	–	–	–	1	1	*	81	123	–	–	–	–	–
Camden	–	–	–	15	–	2	335	319	–	–	–	2	–
Cedar	–	–	–	56	2	–	221	110	–	–	–	3	–
Dallas	–	–	–	2	–	*	52	99	–	–	–	–	–
Hickory	–	–	–	–	–	*	39	88	–	–	–	–	–
Laclede	–	–	–	55	–	6	533	368	–	–	–	5	–
Maries	–	–	–	112	–	2	439	370	–	–	–	22	–
Miller	–	–	–	42	76	5	168	163	–	–	–	–	–
Morgan	–	–	–	1	2	1	127	77	–	–	–	–	–
Phelps	–	–	–	64	–	1	603	395	–	–	–	10	–
Polk	–	–	–	2	–	*	21	90	–	–	–	–	–
Pulaski	–	–	–	79	–	7	828	337	–	–	–	5	–
St. Clair	–	–	–	*	–	–	94	289	–	–	–	–	–
Total	–	–	–	430	81	25	3,582	2,810	–	–	–	47	–

(Table 19 continued on next page)

(Table 19 continued)

Forest Survey Unit and county	Species group												
	Sweetgum	Yellow-poplar	Tupelo	Sycamore	Cottonwood	Black cherry	Red oak group	White oak group	Willow	Sassafras	Basswood	Elm	Kentucky coffeetree
Prairie Unit													
Adair	–	–	–	10	20	–	90	90	–	–	3	–	–
Andrew	–	–	–	*	20	–	13	7	–	–	3	–	*
Atchison	–	–	–	19	100	–	83	8	–	–	3	–	–
Audrain	–	–	–	27	26	–	151	83	–	–	3	1	–
Barton	–	–	–	132	22	–	205	126	–	–	–	–	–
Bates	–	–	–	60	8	–	129	63	–	–	–	2	–
Buchanan	–	–	–	*	8	–	5	8	–	–	8	–	*
Caldwell	–	–	–	11	77	–	80	28	–	–	–	1	*
Carroll	–	–	–	39	150	–	49	31	–	–	–	5	–
Cass	–	–	–	–	3	–	7	5	–	–	–	–	–
Charlton	–	–	–	25	375	–	498	75	–	–	–	–	–
Clark	–	–	*	26	123	*	101	112	–	–	3	1	–
Clay	–	–	–	9	16	–	9	10	–	–	*	3	–
Clinton	–	–	–	12	68	–	21	24	–	–	–	2	*
Cooper	–	–	–	9	9	–	42	13	*	–	*	–	–
Dade	–	–	–	23	–	–	108	37	–	–	–	–	–
Daviess	–	–	–	42	184	–	56	39	–	–	10	2	*
De Kalb	–	–	–	13	70	–	61	34	–	–	3	2	*
Gentry	–	–	–	9	51	–	27	7	–	–	–	1	*
Greene	–	–	–	*	–	*	36	61	–	–	–	–	–
Grundy	–	–	–	26	86	–	28	27	–	–	11	2	–
Harrison	–	–	–	11	82	–	86	54	–	–	3	2	*
Henry	–	–	–	11	8	–	77	104	–	–	–	–	–
Holt	–	–	–	–	13	–	83	8	–	–	3	–	–
Jackson	–	–	–	4	3	–	3	2	–	–	*	–	–
Jasper	–	–	–	43	4	–	95	47	–	–	–	–	–
Johnson	–	–	–	*	3	–	1	1	–	–	–	–	–
Knox	–	–	–	23	40	–	174	90	–	–	2	–	–
Lafayette	–	–	–	11	50	*	21	14	*	–	*	2	–
Lawrence	–	–	–	–	–	*	229	107	–	–	–	–	–
Lewis	–	–	–	24	34	–	109	111	–	–	2	*	–
Lincoln	–	–	–	35	8	–	113	169	–	–	–	22	–
Linn	–	–	–	22	99	–	140	55	–	–	–	–	–
Livingston	–	–	–	47	151	–	87	36	–	–	10	3	–
Macon	–	–	–	47	41	–	259	115	–	–	2	–	–
Marion	–	–	–	52	40	–	146	71	–	–	11	–	–
Mercer	–	–	–	9	75	–	33	16	–	–	1	1	–
Monroe	–	–	–	59	50	–	266	137	–	–	3	–	–
Nodaway	–	–	–	*	6	–	11	6	–	–	–	–	*
Pettis	–	–	–	*	5	*	5	9	–	–	–	–	–
Pike	–	–	–	37	26	–	430	227	–	–	3	9	–
Platte	–	–	–	–	*	–	1	1	–	–	*	–	–
Putnam	–	–	–	–	29	–	27	109	–	–	3	–	–
Ralls	–	–	–	56	49	–	161	130	–	–	15	7	–
Randolph	–	–	–	56	170	*	770	140	–	–	1	*	–
Ray	–	–	–	10	56	–	6	13	–	–	–	2	–
Saline	–	–	–	25	32	*	62	26	*	–	*	–	–
Schuyler	–	–	–	3	5	–	19	16	–	–	1	–	–
Scotland	–	–	–	9	76	–	83	38	–	–	3	14	–
Shelby	–	–	–	24	22	–	112	62	–	–	2	–	–
Sullivan	–	–	–	1	59	–	47	38	–	–	1	–	–
Vernon	–	–	–	43	11	–	192	67	–	–	–	13	–
Worth	–	–	–	2	12	–	6	37	–	–	3	1	–
Total	–	–	*	1,157	2,654	1	5,635	2,965	*	–	115	94	2
Riverborder Unit													
Boone	–	–	–	34	19	–	224	166	–	–	–	*	–
Callaway	–	–	–	16	30	–	261	152	–	–	1	1	–
Cape Girardeau	17	66	–	19	9	9	596	396	–	–	5	*	–
Cole	–	–	–	4	4	–	41	37	–	–	–	–	–
Dunklin	7	–	–	11	34	–	17	16	–	–	–	–	–
Franklin	–	–	–	11	3	3	184	126	–	–	–	5	–
Gasconade	–	–	–	32	16	1	348	307	–	–	–	7	–
Howard	–	–	–	162	303	–	251	106	*	–	*	*	–
Jefferson	–	14	–	4	*	3	325	294	–	–	–	2	–
Mississippi	–	–	–	–	1	–	–	–	–	–	–	1	–
Moniteau	–	–	–	1	2	–	20	11	–	–	–	–	–
Montgomery	–	–	–	22	34	–	115	107	–	–	–	3	–
New Madrid	–	–	–	2	110	3	55	12	–	–	–	23	–
Osage	–	–	–	45	29	–	532	325	–	–	–	1	–
Pemiscot	–	–	–	2	90	–	–	–	–	–	–	–	–
Perry	2	49	–	16	6	10	491	365	–	–	–	–	–
Scott	*	13	–	*	9	2	66	47	–	–	–	–	–
St. Charles	–	–	–	39	362	–	79	62	–	–	–	12	–
St. Louis	–	–	–	6	–	–	68	52	–	–	–	1	–
Ste. Genevieve	–	6	–	15	7	2	262	195	–	–	–	1	–
Stoddard	13	*	–	36	5	*	97	88	–	–	–	–	–
Warren	–	–	–	35	26	*	110	138	–	–	–	33	–
Total	39	150	–	516	1,104	34	4,161	3,027	*	–	8	91	–
State total	219	272	150	3,013	3,960	115	46,355	22,200	*	4	122	405	2

* Less than 500 cubic feet

Table 20. -- Residues produced at primary wood-using mills by Forest Survey Unit, type of use, and residue type, Missouri, 1997

(In thousand green tons)

Forest Survey Unit and type of use	Total all material		Residue type							
			Wood residue							
			Total		Coarse [1]		Fine [2]		Bark	
	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
Eastern Ozark Unit										
Fiber products	14.4	115.8	14.4	115.8	14.3	115.8	0.1	--	--	--
Charcoal	45.2	505.7	35.2	411.8	25.0	256.6	10.2	155.2	10.0	93.9
Industrial fuel	1.7	28.4	1.7	26.3	--	0.5	1.7	25.8	*	2.2
Domestic fuel	3.7	18.7	3.7	16.5	0.3	5.1	3.4	11.4	*	2.2
Miscellaneous [3]	11.8	103.2	4.0	33.9	2.5	24.1	1.5	9.8	7.8	69.3
Not used	17.2	120.7	13.9	101.1	4.7	31.8	9.2	69.3	3.3	19.6
Total	94.0	892.5	72.9	705.5	46.9	433.9	26.1	271.6	21.1	187.1
Southwestern Ozark Unit										
Fiber products	1.7	26.4	1.7	26.4	1.7	26.4	--	--	--	--
Charcoal	14.3	203.7	12.1	170.7	6.9	113.2	5.2	57.5	2.2	33.0
Industrial fuel	*	19.2	--	15.9	--	8.7	--	7.2	*	3.3
Domestic fuel	0.6	7.2	0.5	5.4	0.3	5.1	0.2	0.3	0.1	1.8
Miscellaneous [3]	19.5	44.0	13.2	16.4	8.0	0.8	5.2	15.8	6.3	27.6
Not used	4.8	19.0	4.0	17.1	2.0	4.6	1.9	12.5	0.9	1.9
Total	40.9	319.5	31.4	251.9	19.0	158.8	12.5	93.1	9.4	87.6
Northwestern Ozark Unit										
Fiber products	0.0	7.4	--	7.4	--	7.4	--	--	--	--
Charcoal	0.0	33.9	--	27.2	--	16.4	--	10.8	--	6.7
Industrial fuel	1.7	10.7	1.7	9.9	0.1	0.1	1.7	9.8	*	0.9
Domestic fuel	0.1	8.6	0.1	6.6	0.1	5.8	--	0.8	*	2.0
Miscellaneous [3]	5.2	29.7	4.3	19.6	3.8	12.9	0.4	6.7	1.0	10.0
Not used	0.0	4.2	0.0	3.6	--	1.6	*	2.0	--	0.7
Total	7.2	94.5	6.1	74.3	4.0	44.1	2.1	30.1	1.0	20.2
Prairie Unit										
Fiber products	0.0	60.1	--	58.8	--	58.6	--	0.2	--	1.3
Charcoal	0.0	14.1	--	12.3	--	4.3	--	8.1	--	1.8
Industrial fuel	1.3	50.6	0.9	45.3	--	21.5	0.9	23.7	0.4	5.3
Domestic fuel	0.0	59.1	--	44.8	--	43.6	--	1.2	--	14.3
Miscellaneous [3]	0.1	113.3	0.1	72.0	*	22.5	*	49.5	*	41.3
Not used	0.0	90.0	--	72.1	--	45.7	--	26.4	--	17.9
Total	1.4	387.1	1.0	305.1	*	196.1	0.9	109.0	0.4	82.0
Riverborder Unit										
Fiber products	0.0	65.8	--	65.8	--	65.8	--	--	--	--
Charcoal	*	41.0	*	37.3	*	15.5	--	21.7	*	3.7
Industrial fuel	*	54.4	--	45.9	--	16.1	--	29.8	*	8.4
Domestic fuel	0.2	5.8	0.2	4.2	0.2	4.2	--	--	0.1	1.8
Miscellaneous [3]	2.9	77.8	2.4	37.3	1.6	17.3	0.9	20.0	0.5	40.5
Not used	0.2	10.8	0.2	9.5	*	7.2	0.1	2.3	*	1.3
Total	3.3	255.5	2.8	200.0	1.8	126.3	1.0	73.8	0.5	55.5
All Units										
Fiber products	16.1	275.5	16.1	274.2	16.0	274.0	0.1	0.2	--	1.3
Charcoal	59.5	798.3	47.3	659.2	32.0	405.9	15.3	253.3	12.2	139.1
Industrial fuel	4.7	163.3	4.3	143.2	0.1	46.9	4.2	96.4	0.4	20.1
Domestic fuel	4.7	99.4	4.5	77.5	0.9	63.8	3.6	13.7	0.2	21.9
Miscellaneous [3]	39.5	367.9	24.0	179.3	16.0	77.7	8.0	101.5	15.5	188.6
Not used	22.2	244.6	18.1	203.3	6.8	90.9	11.3	112.4	4.2	41.3
Total	146.7	1,949.1	114.3	1,536.8	71.7	959.2	42.6	577.6	32.5	412.3

* Less than 50 green tons.

[1] Suitable for chipping such as slabs, edgings, veneer cores, etc.

[2] Not suitable for chipping such as sawdust, veneer clippings, etc.

[3] Livestock bedding, mulch, small dimension, specialty items, etc.

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Discusses recent Missouri forest industry trends; production and receipts of industrial roundwood; and production of saw logs, veneer logs, cooperage, charcoal, and other products in 1997, and compares findings with earlier surveys. Reports on the quantity, type, and disposition of wood and bark residues generated by the primary wood-using industry.

KEY WORDS: Industrial roundwood, saw logs, veneer logs, cooperage, handle bolts, charcoal, posts, pulpwood, production, receipts, residues.

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